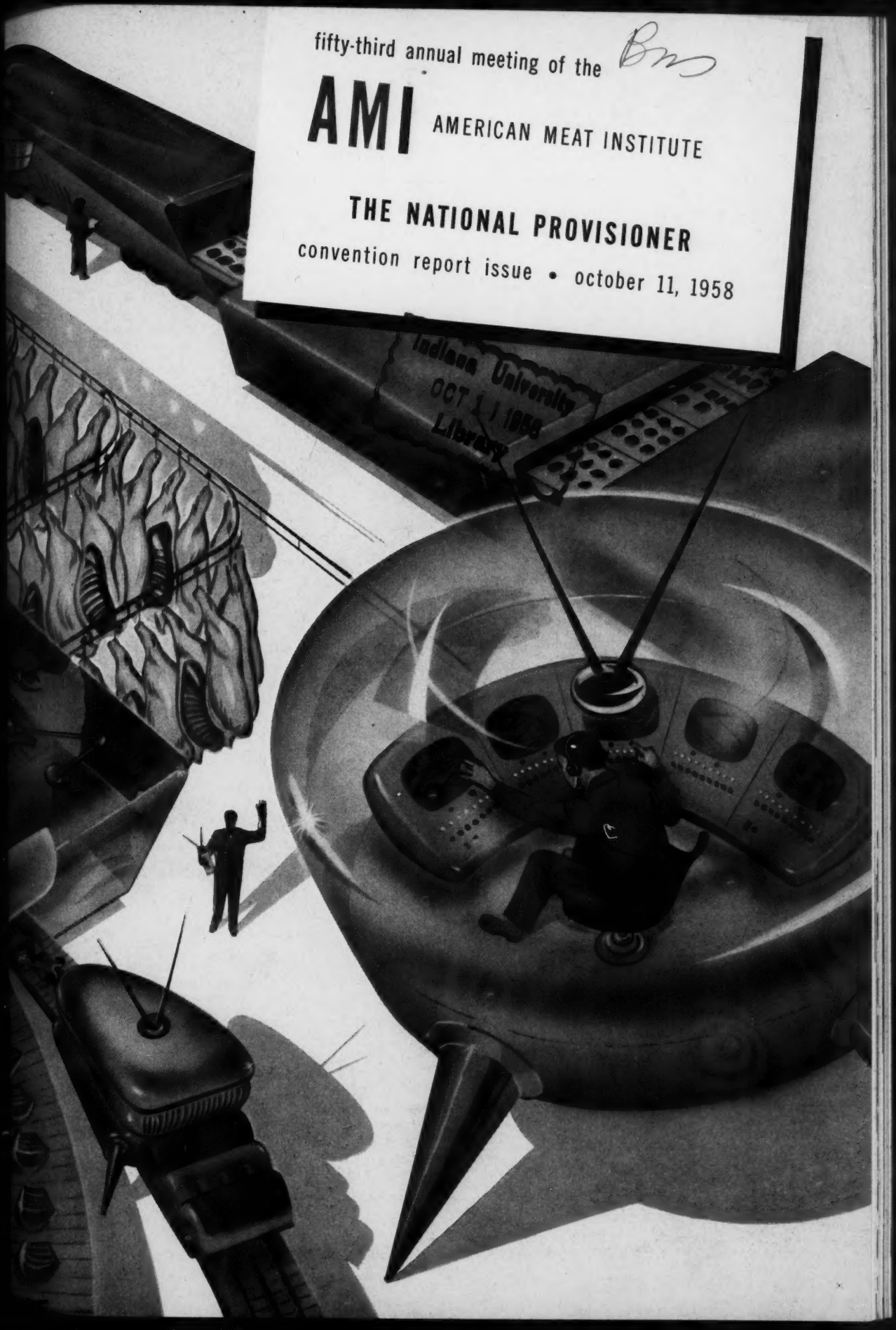
fifty-third annual meeting of the

AMI

AMERICAN MEAT INSTITUTE

THE NATIONAL PROVISIONER

convention report issue • october 11, 1958



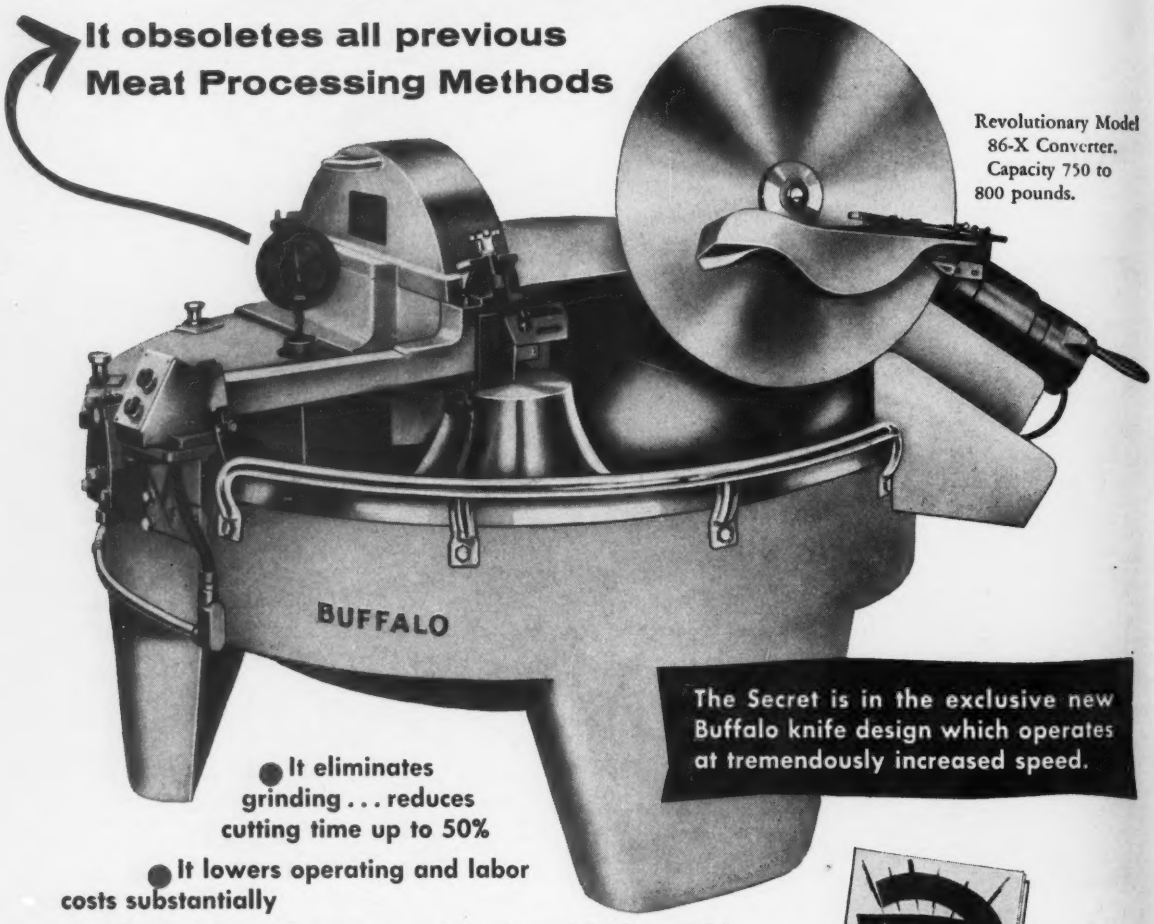
Indiana University
OCT 1 1 1958
Library

IT'S SENSATIONAL

...this NEW Buffalo

"DIRECT CUTTING" CONVERTER

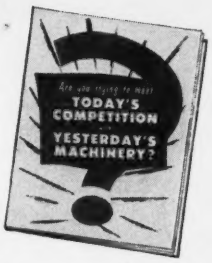
It obsoletes all previous Meat Processing Methods



Revolutionary Model 86-X Converter. Capacity 750 to 800 pounds.

The Secret is in the exclusive new Buffalo knife design which operates at tremendously increased speed.

- **It eliminates grinding . . . reduces cutting time up to 50%**
- **It lowers operating and labor costs substantially**
- **It produces a finer textured product of higher yield**



Send for Catalog

This revolutionary Converter is like a jet plane. Older types of machines just can't stay with it. A Converter will put you miles ahead of competition. Better get one before your competition does (some already have)! Write or call us direct or see your Buffalo representative right away about a "Direct-Cutting" Converter.

The name that has meant the best in Sausage Machinery for more than 90 years

Buffalo

JOHN E. SMITH'S SONS CO. 50 Broadway, Buffalo 3, N.Y.

Sales and Service Offices in Principal Cities

Bull Meat Brand Binder

holds up to 6 Times *its own weight in meat juices and moisture*

- **No other binder can match the 6-to-1 performance of Bull Meat Brand in absorption and moisture-holding power.**
- **Your sausage stays plump, moist, firm — no shrinkage or shriveling. It tastes better, juicier. Texture and slicing qualities are improved.**
- **From day to day or year to year your results are uniform, predictable, profitable — for Bull Meat Brand Binder, blended of five selected grains, is under critical and continuous laboratory control.**
- **It's a 6-to-1 certainty that Bull Meat Brand is your best buy in Binder. For more than fifty years, experience has proved it to the meat industry.**

Write us, or ask your Heller man for a free usable sample.

B. HELLER & COMPANY

CALUMET AVE. AT 40th STREET · CHICAGO 15, ILLINOIS

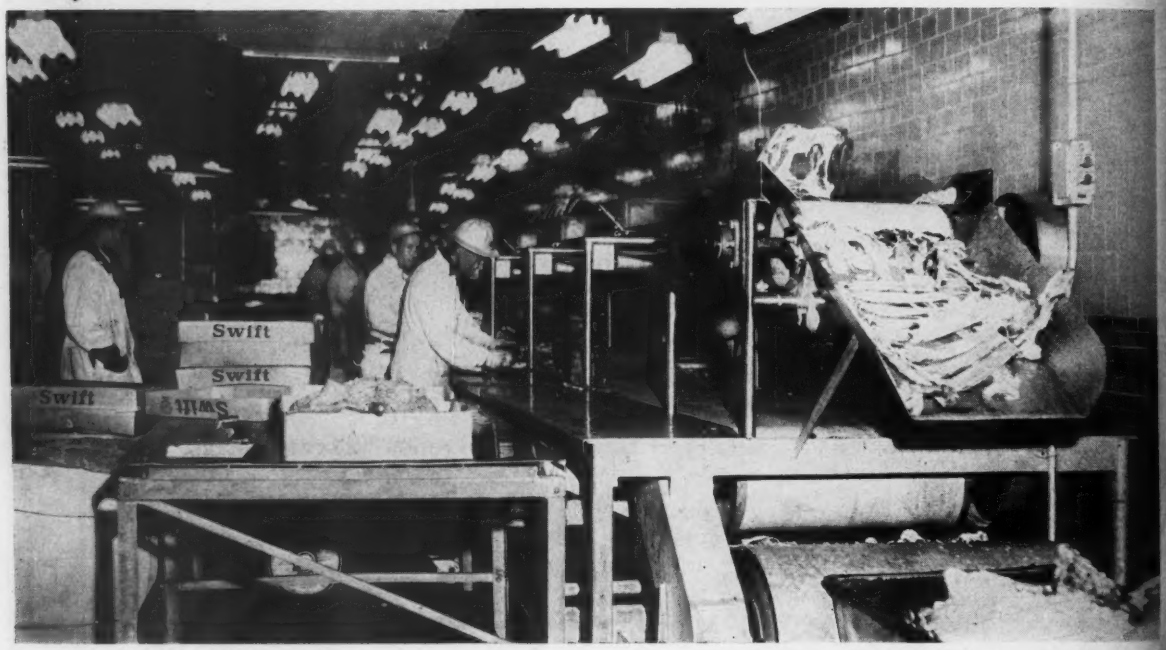
Serving the Food Industry Since 1893

UNIFORMITY INTEGRITY PURITY

THE NATIONAL PROVISIONER, Vol. 139, No. 15, Published weekly at 15 W. Huron St., Chicago 10, Ill., U.S.A., by The National Provisioner, Inc. Yearly subscription: U.S. $6.00; Canada, $8.00; Foreign countries, $8.00. Single copies 30 cents. Copyright 1958 by The National Provisioner, Inc. Trade Mark Registered in U.S. Patent Office. Entered as second-class matter October 9, 1919, at the Post Office at Chicago, Ill., under the act of March 3, 1879.

FOR GREATER EFFICIENCY IN YOUR BEEF BONING ROOM

HERE IS AN EXAMPLE OF MATERIALS HANDLING ENGINEERING, AS APPLIED BY H. H. EDWARDS TO THE BEEF CUTTING AND BONING OPERATIONS.



This conveying line was recently installed by H. H. Edwards in the beef cutting and boning room of the Ocala, Florida plant of Swift & Company.

The quarters are broken with a sliding table band saw and move via this wide belt conveyor to the butcher stations. Boned, trimmed and defatted cuts are replaced on the conveyor for movement to the packoff station. Bones are placed on conveyor located above the boning table—and discharge into suitable containers. The bone conveyor is provided with a triangular guard of stainless metal that prevents the bones from falling off the carrier.

Edwards experience and service for the meat industry embrace the following types of materials handling equipment:

MANY TYPES OF CONVEYORS

• Meat Tracks & Scales • Trolleys & Shelving • Monorail Systems (electric & hand-operated) • Cranes & Hoists

---

H. H. EDWARDS

ENGINEERS AND CONTRACTORS

550 West 53rd St. • New York 19, N. Y. • Phone: Circle 7-5630

ST. JOHN

"Famous for Stainless"

CLEAN-LINE YOUR PRODUCTION

St. John Equipment is exactly tailored to your requirements

St. John "standard equipment" may easily be modified to meet any conditions of operation or production.

If you need a *special* design, entirely different from our known "standards", we are equipped to engineer and produce it quickly and economically.

Clean-Lining your production with St. John Stainless Steel Equipment shows a profit from the start. Clean-up and maintenance is reduced to a minimum. Then, because it is built to last, St. John Equipment outwears ordinary types by as much as 3 times. And, of course, it meets the most rigid sanitary inspection requirements.

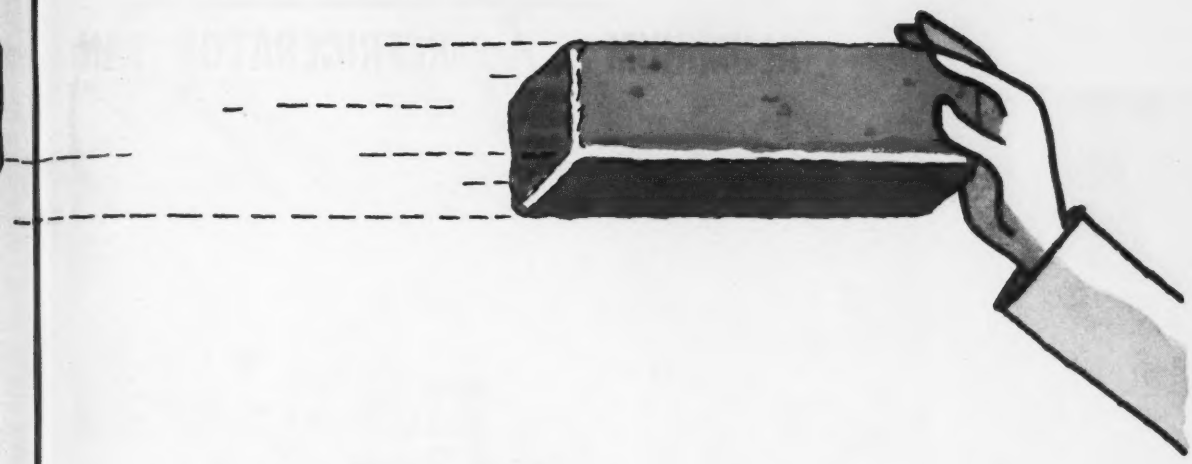
Whether you need a single meat truck or wish to Clean-Line a complete installation, write or wire for information.

FOOD PROCESSING EQUIPMENT — ST. JOHN — CHICAGO — BUILT TO LAST

nothing sells li

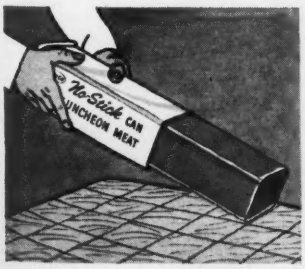


like convenience

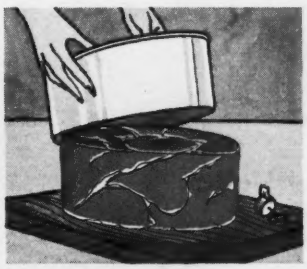


...and Canco's *No-Stick* cans are proving it!

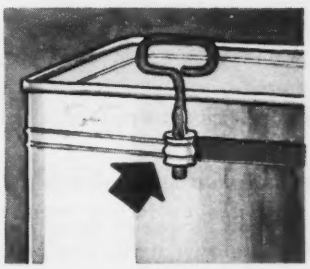
Everyone values the exceptional convenience offered by Canco's amazing *No-Stick* cans. That's why they've been so widely accepted, so quickly acclaimed—in homes, restaurants, cafeterias, institutions. Make sure *your* brands have the important selling advantages provided by these advanced containers. Talk to the man from Canco today!



Pullman hams—luncheon meats g-l-i-d-e right out—no prying or shaking!



Even whole hams can't stick—housewives are amazed and delighted!



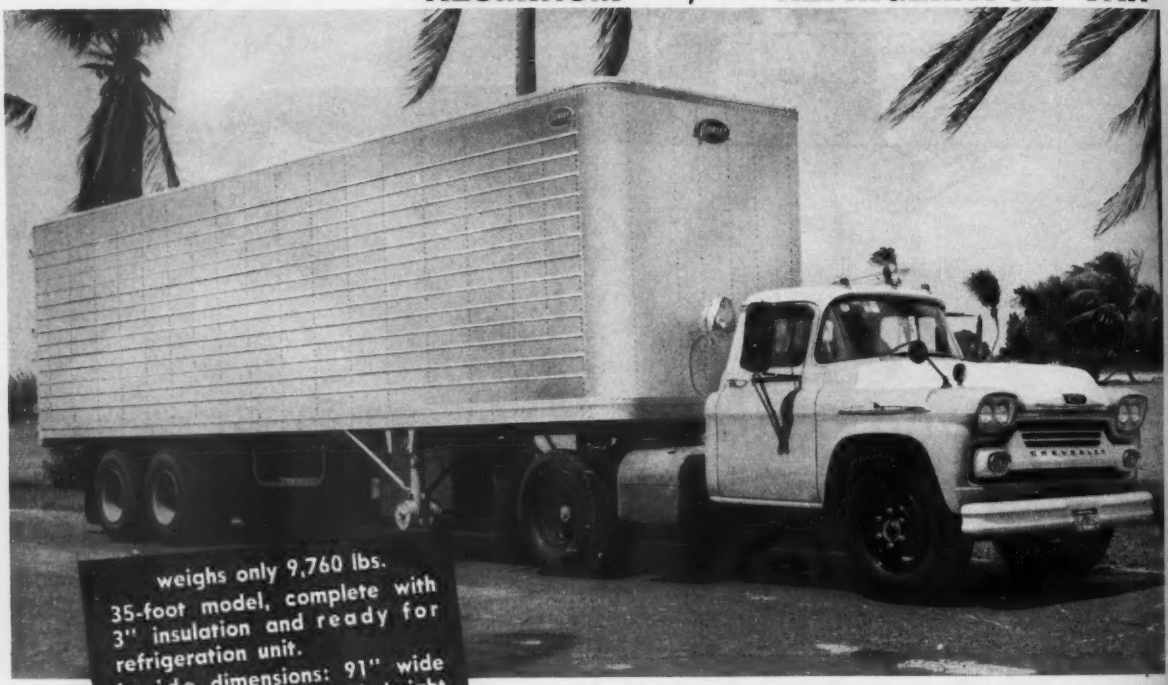
New "self-tracking" tear strip can't spiral—makes opening easier than ever!

American Can Company CANCO

APACE WITH THE SPACE AGE !

The ALL-NEW DORSEY SATELLITE

ALUMINUM REFRIGERATOR VAN



weighs only 9,760 lbs.
35-foot model, complete with 3" insulation and ready for refrigeration unit.
Inside dimensions: 91" wide and 90" high. 94" inside height also available.

The same Monocoque engineering principles that give modern aircraft their strength with minimum weight were utilized in designing the new Dorsey Satellite: The body is built entirely of heat-treated alloy aluminum with sides and front solid-riveted into a fully-stressed integral structure. And when you see the Satellite's beauty and quality of construction, you'll be surprised at the price! Standard equipment includes extruded aluminum floors. In addition —

Assembly-line insulation means a better job, performed by specialists supervised by factory engineers.

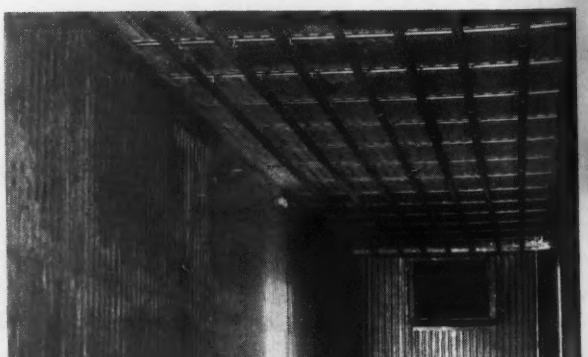
Tailor your trailer to your needs and budget: a wide choice of options enables you to have your Satellites virtually custom-built at a mass-production price.

DORSEY TRAILERS SALES-SERVICE

Your Dorsey Distributor is a substantial, independent businessman with a factory-trained staff to serve you.

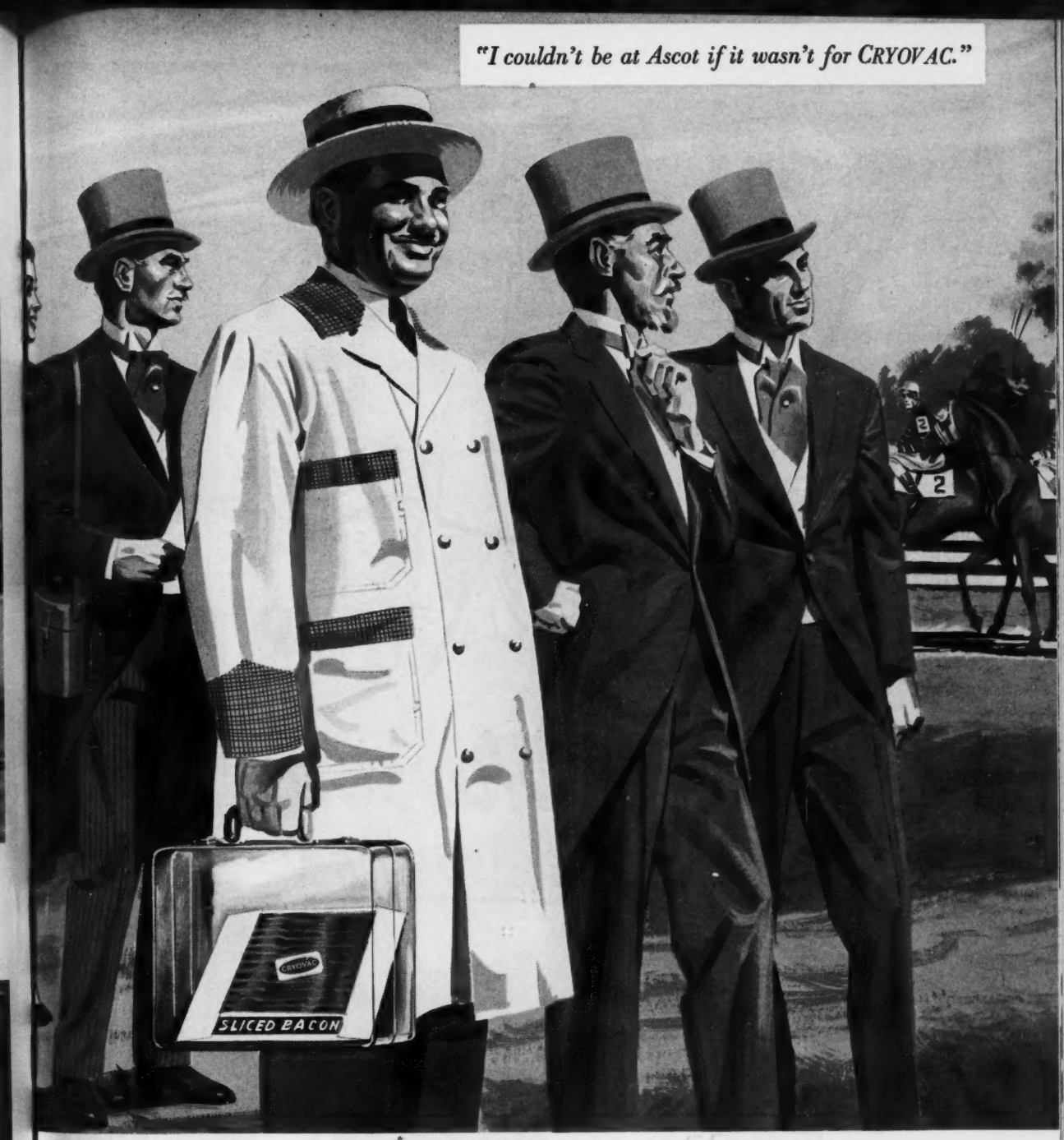
DORSEY TRAILERS
Elba, Alabama

RUGGED MEAT RAILS . . . A DORSEY SPECIALTY



Longitudinal meat rails for hanging loads are *built-in* as an integral part of the body. Special design simplifies thorough cleaning.

Step-sealed doors have extruded plastic seals for absolutely tight fit. Two sets of pressure type hardware open doors easily, even at zero.



"I PUT MYSELF IN THE PROFIT PICTURE... WHEN I PUT MY BACON IN THE PROFIT PACKAGE!"

You may never enter a thoroughbred at Royal Ascot, but you can be in the winner's circle with big new profits . . . when you pack your bacon in CRYOVAC Film. Here's how it works for Bryan Brothers Packing Company of West Point, Mississippi.

Co-owner John Bryan says, "CRYOVAC's tight seal and shrink has eliminated all our difficulties in producing a long-lasting, fast-selling package. The profit begins on our production line. We've saved waste handling and re-wraps, and can pack much faster with CRYOVAC Film."

Put yourself in this profit picture. Get the whole story on bacon in CRYOVAC Film . . . the *new*, weld-sealing, air and moisture-proof transparent wrap. Write Advertising Manager, The CRYOVAC Company, Cambridge 40, Massachusetts.

● THE CRYOVAC COMPANY
Division of W. R. Grace & Co.
Cambridge 40, Mass.
2365 Dixie Rd. N, Port Credit, Ontario

CRYOVAC THE PROFIT PACKAGE



THURINGER
WIENER
NEW ENGLAND
HAM SPICE
CERVELAT
POLISH
ITALIAN
LIVER
BOLOGNA
KALBASI

CORNED BEEF
PASTRAMI
BRAUNSCHWEIGER
VIENNA
SMOKY LINKS
CHIPPED BEEF
POTTED MEAT
PORK
COUNTRY SMOKE
SUMMER
CHICKEN LOAF
SALAMI
SOUSE
BOCKWURST
GOOSE LIVER
METTWURST
HEAD CHEESE
BARBECUE
ROAST MEAT
HAMBURGER
And HUNDREDS of OTHERS!

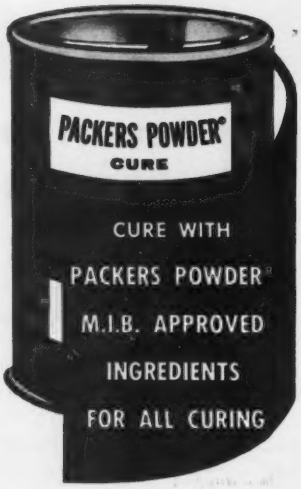
taste buds blossom

with Kadison quality SEASONINGS!

Continuous research in our most modern laboratories is bringing new methods of enhancing and stabilizing flavor.

Continuous research to develop better flavor, color, shelf life, and yields is our main function!

May We Be of Service to You???



Manufacturing Chemists for the Food Industry

Kadison
LABORATORIES, Inc.
703 W. ROOT • CHICAGO 9, ILLINOIS



PACKERS POWDER®
CURE

The users of this product reads like *"The Who's Who" in the industry!*
Hundreds and hundreds of daily users of
Packers Powder Cure attest to its reliability.

You Can't Afford Not to Try a Drum on Approval!

- FOOL PROOF
- FREE FLOWING
- PERFECTLY INTEGRATED
- NO WET SPOTS

Kadison
LABORATORIES, Inc.
703 W. ROOT • CHICAGO 9, ILLINOIS

Manufacturing Chemists for the Food Industry

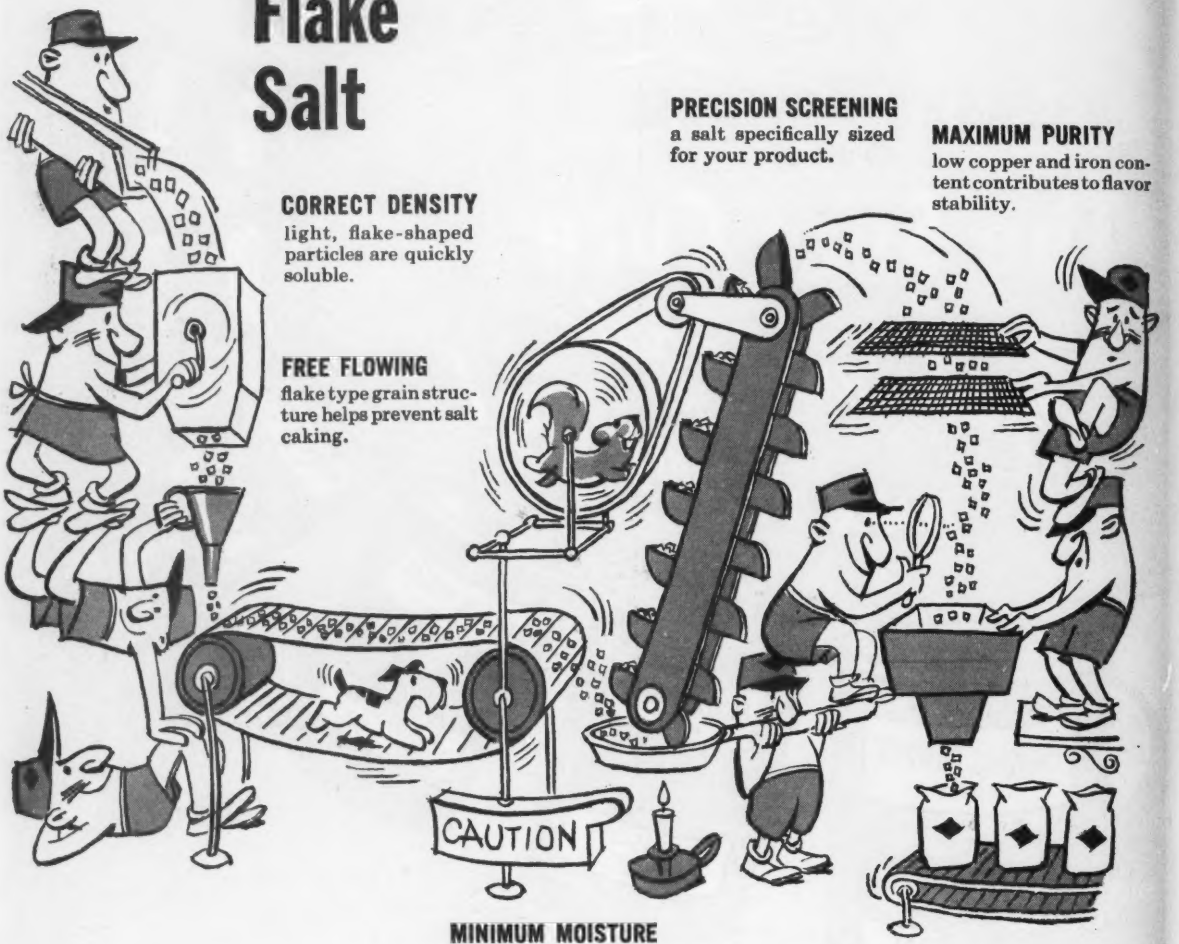
Diamond Crystal Flake Salt

CORRECT DENSITY
light, flake-shaped particles are quickly soluble.

FREE FLOWING
flake type grain structure helps prevent salt caking.

PRECISION SCREENING
a salt specifically sized for your product.

MAXIMUM PURITY
low copper and iron content contributes to flavor stability.



MINIMUM MOISTURE
salt dried to less than 1/10 of one percent moisture content.

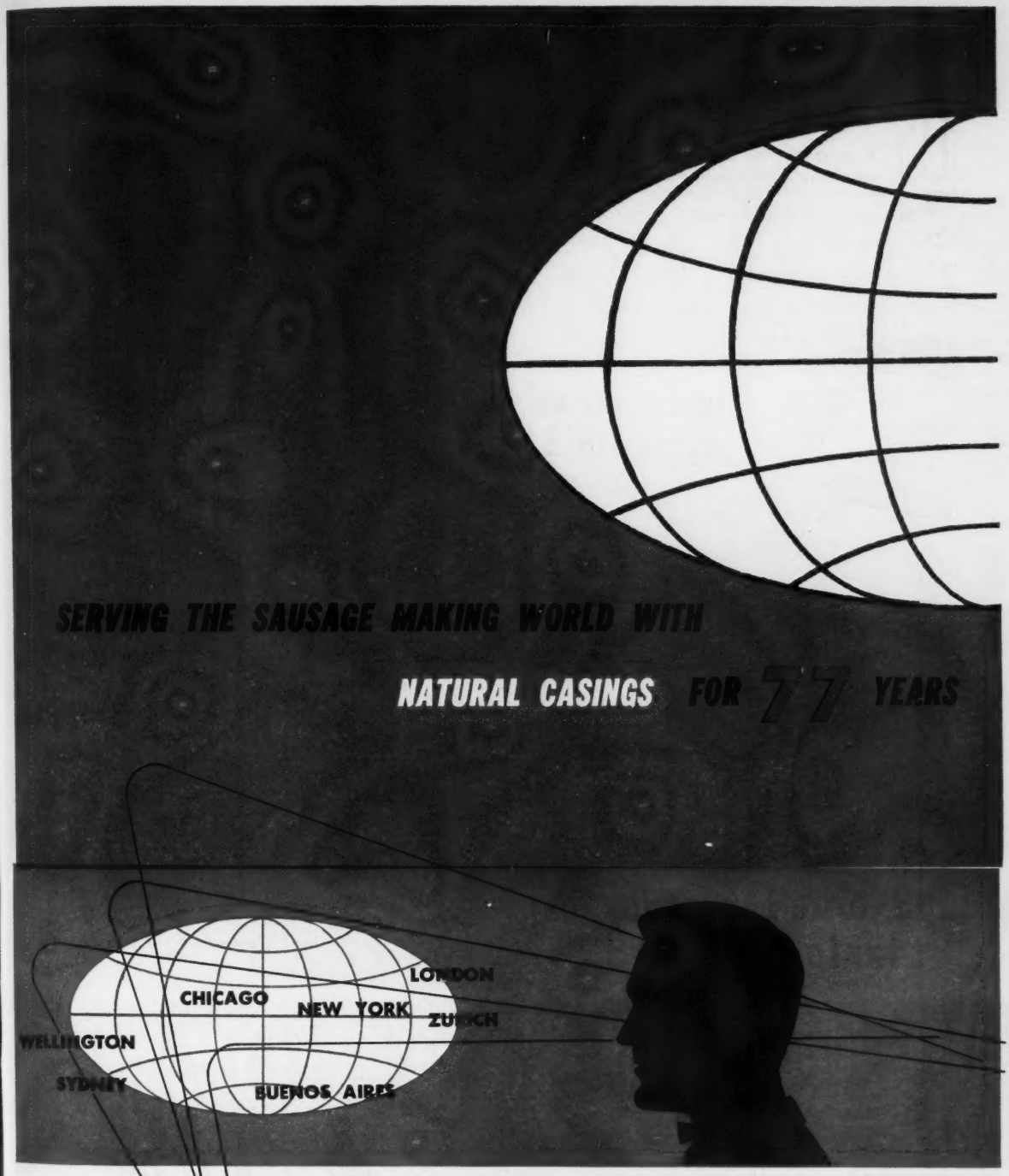
TRUE FLAVOR
results from Diamond Crystal's exclusive Alberger process. It brings out the best in your products.

Its worth is reflected in your product

Look at the facts. *Flake*—not cube or granular type salt—is the positive answer to the use of salt in canning or curing—casings or sausage meats.

It all boils down to your product quality. We can help. Write to—Technical Department, Diamond Crystal Salt Co., St. Clair, Michigan, for proof—for facts—or talk to the Diamond Crystal salesman.

Diamond Crystal Salt Co.



BERTH. LEVI & CO. INC.

ALL BRANCHES JOINING TO SATISFY YOUR CASING NEEDS

THE CASING HOUSE

3944 South Hamilton Ave., Chicago 9, Illinois

When you buy from Berth. Levi, you buy service, integrity, and dependability as well as fine natural casings. Let us serve you as we have served the entire sausage making world for 77 years.

Custom
FOOD PRODUCTS INC.
MANUFACTURERS OF QUALITY FOODS AND FOOD INGREDIENTS
701-709 N. WESTERN AVENUE • CHICAGO 12, ILLINOIS
NP 10-118 EVerglade 4-0530

Ideas for
PROFIT





PRICE ALONE WILL NEVER BUILD BRAND PREFERENCE!

Actually, there is just one way to develop brand preference—and we all know it. Only the quality and flavor of your product can keep customers reaching for it in the retailer's display cases.



Packaging develops brand **identification** and price brings in the bargain hunter—but quality and flavor are the only thing that makes the customer want your product again.



Here at Custom we have specialized in producing tailor-made flavors for all types of specialty products. Once we have developed a special flavor, it belongs to that customer alone and he is certain of receiving that exact blend every time.



We have found numerous ways to reduce processing costs in hundreds of different plants, and your Custom Field Man is always ready to analyze your operation for short-cuts, too. Give him the chance to serve you—it costs you nothing.



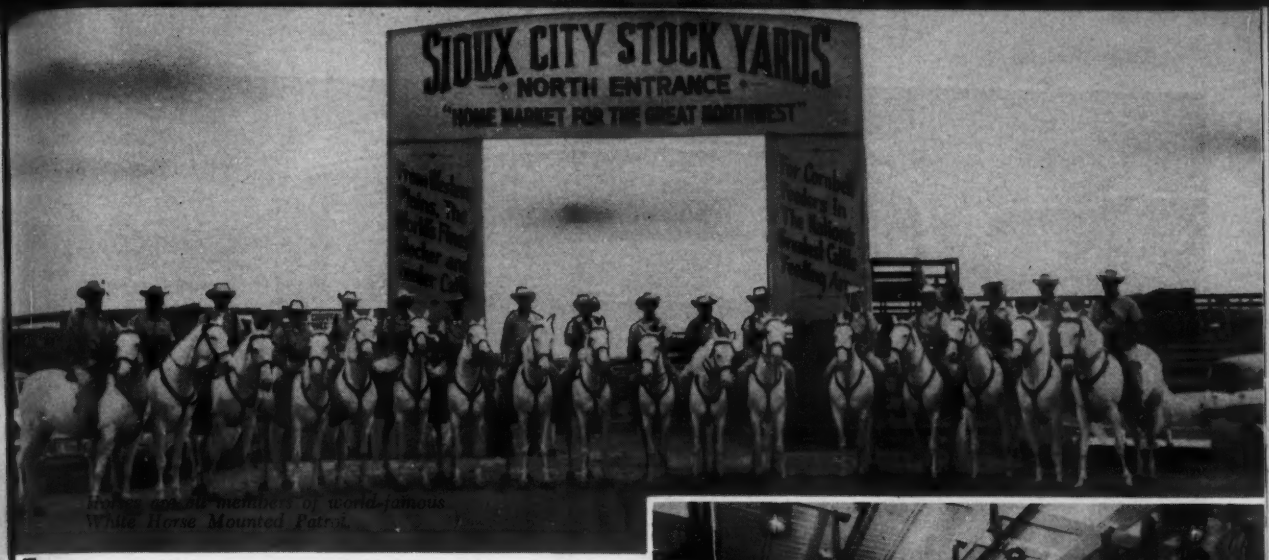
CUSTOM FOOD PRODUCTS, INC.

M. J. Phee

M. J. Phee
Sales Manager

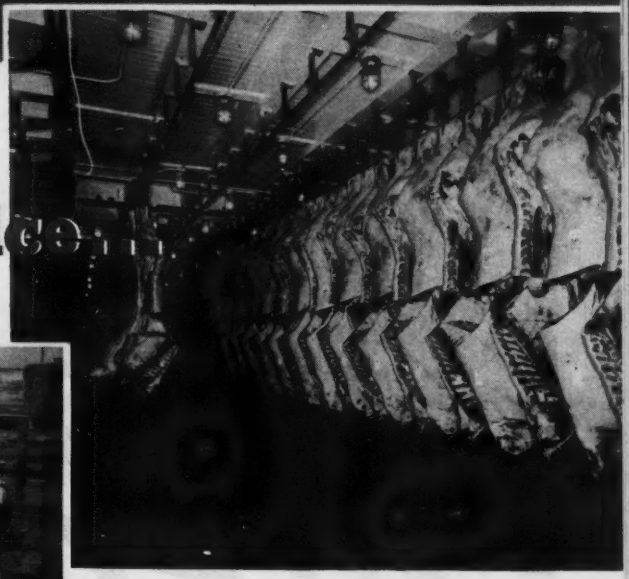


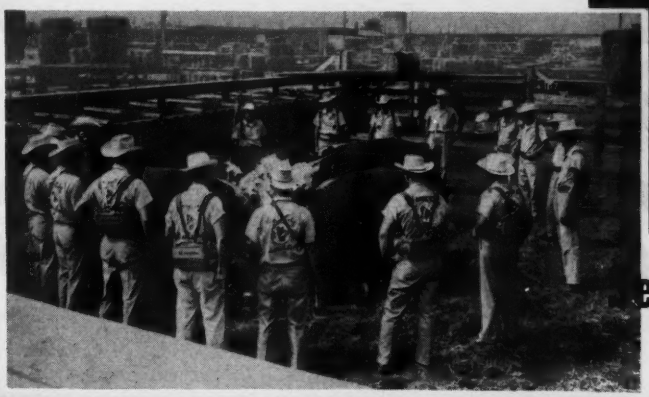




Iowa's colorful members of world-famous White Horse Mounted Patrol.

Buying the Best at the Right Price





Seventeen Radio-Equipped Experts Select....

SIOUX LAND BEEF

THE CHOICEST PRODUCT FROM THE LAND OF PLENTY

- Split-second market information provided to our buyers in the field enable them to BUY RIGHT at the RIGHT TIME.
- Lots of corn means lots of choice beef — this combination never looked brighter than in the Sioux City market!
- Our Universal Brand of SIOUX LAND BEEF has made it "tops" from coast to coast — both KOSHER and trefa.
- You can pay more . . . but you can't buy better!

PHONE 2-3661 AND ASK FOR:

JAMES NEEDHAM (Carcass and Offal Sales) DON DENNIS

LLOYD NEEDHAM, Gen. Manager JERRY KOZNEY, Asst. Manager

best dressed beef

SIOUX CITY DRESSED BEEF, Inc.

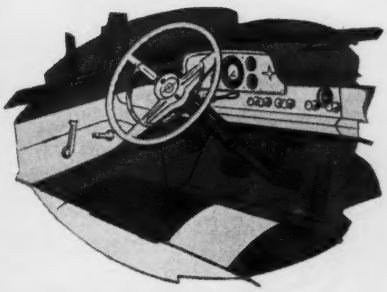
SIOUX CITY Stock Yards



GO FORD-WARD







New Cab Interiors! You'll think you're in a passenger car! Comfortable Custom Cab offers longer wearing fabrics, new modern steering wheel with integral horn ring. Two-toned doors, seats; instrument panel two-toned, chrome-trimmed.

New Styleside Pickups! Notice the handsome new grille, dual headlights, stronger wrap-around bumper. The cab-wide body holds 23% more than any conventional pickup box. 6½-, 8- and 9-ft. boxes available in Styleside or Flareside models. Short Stroke Six or V-8 engines.



New 4-wheel Drive Pickups! Now, half-ton and ¾-ton users can buy Ford-built 4-wheel drive trucks at Ford's low prices. These Fords can take on the roughest, toughest off-road assignments with sure-footed ease. Here are the trucks built to operate in mud and sand, climb grades of over 60%. All-new, and available about December 1, 1958.

NEW '59 FORD TRUCKS

for savings!



▲ **New Tilt Cab Tandems!** Now, Ford Tilt Cab Tandems with GCW ratings up to 75,000 lb. Now, all the advantages of tilt-cab design with the carrying capacity of tandems. Saves 3 ft. in length, saves hours of maintenance time.

◀ **2-ton Performance Leader** with new 6,000-lb. front axle option for greater load capacity, longer life. Maximum GVW 19,500 lb. Fully automatic Transmatic Drive available. Short Stroke power, Six or V-8.

They're here to take you *Ford*-ward for savings, *Ford*-ward for modern style and dependability!

Here, in *all* 371 models in the '59 Ford line, are modern features that cut costs or contribute to driver efficiency! Features like Ford's economical Short Stroke engines, a wider choice of transmissions, including Ford's new HD Cruise-O-Matic, new cab comfort, the smoothest ride of any pickup!

All this, plus the industry's best durability record—a study of ten million trucks proves Ford trucks last longer! And every Ford has safety glass in every window. See your Ford Dealer today . . . go *Ford*-ward for savings!

FORD TRUCKS COST LESS

Less to own...less to run...last longer, too!

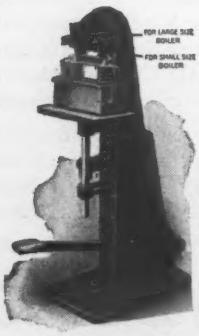
for better boiled hams



In a ham retainer sufficient pressure is required to firmly close the boned cavities, and produce a solid ham. Pressure beyond this point causes excessive shrinkage, at considerable loss. The adjustable ratchet arrangement on all Adelmann Ham Boilers permits *controlled pressure*. Repressing after cooking, is possible, if desired.

Adelmann Ham Boilers have other unusual and exclusive features. Elliptical springs distribute pressure over a wider area, and prevent cover tilting. Simplicity of operation, easy cleaning, and long life—all contribute toward successful results. Hams are firmly moulded, have full flavor, and appetizing appearance. Hams produced in Adelmann Ham Boilers really *sell!*

Send for Catalogue showing complete line.
P.S. Will enclose a useful gift.



FOOT PRESS

Investigate the Adelmann Washer and Adelmann Foot Press. For increased efficiency and speedier operations, both are essential to every modern plant.

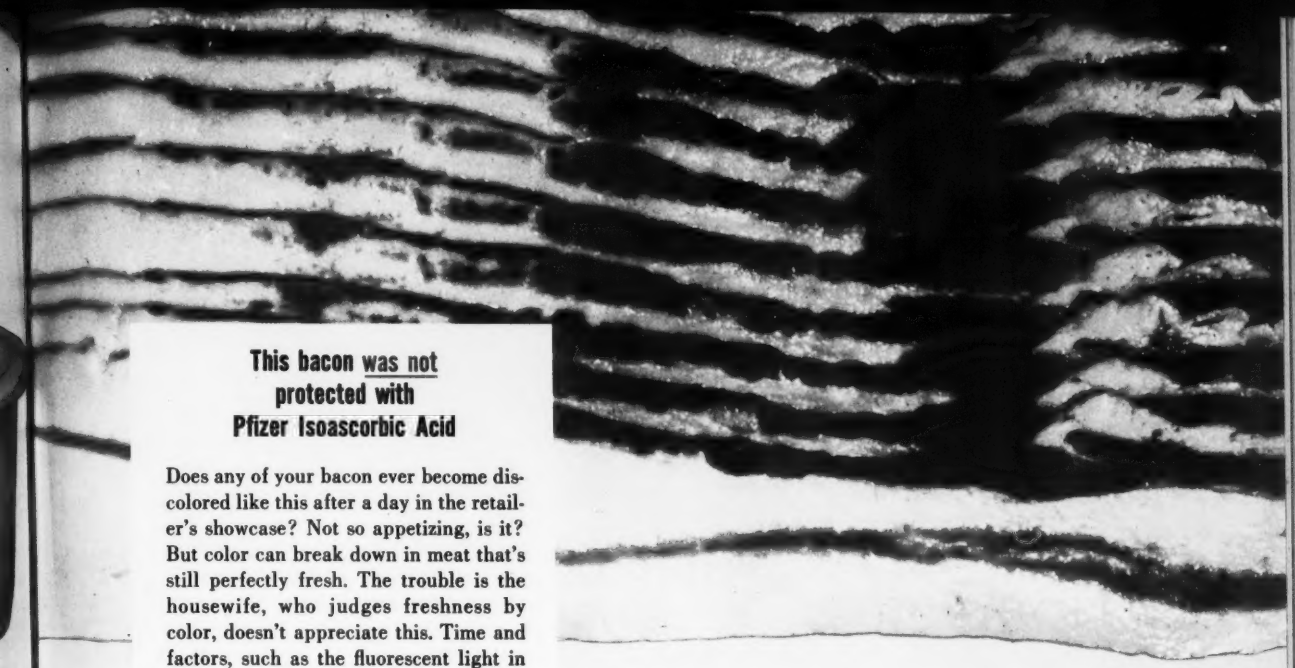


WASHER

HAM BOILER CORPORATION

Office and Factory, PORT CHESTER, N. Y.

ADELMANN — "The Kind Your Ham Makers Prefer"



This bacon was not protected with Pfizer Isoascorbic Acid

Does any of your bacon ever become discolored like this after a day in the retailer's showcase? Not so appetizing, is it? But color can break down in meat that's still perfectly fresh. The trouble is the housewife, who judges freshness by color, doesn't appreciate this. Time and factors, such as the fluorescent light in showcases, cause color change. Protect your bacon and other meat products against this sales handicap with Pfizer Isoascorbic Acid.

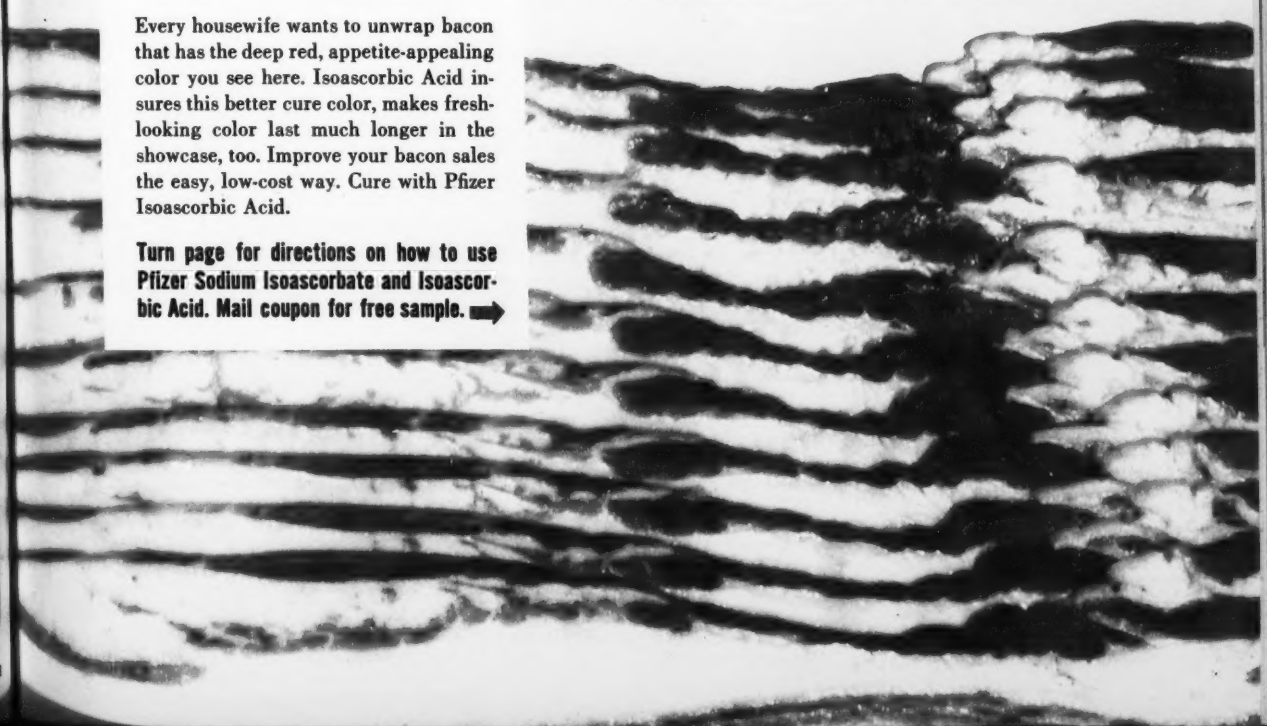
Which bacon would you bring home?

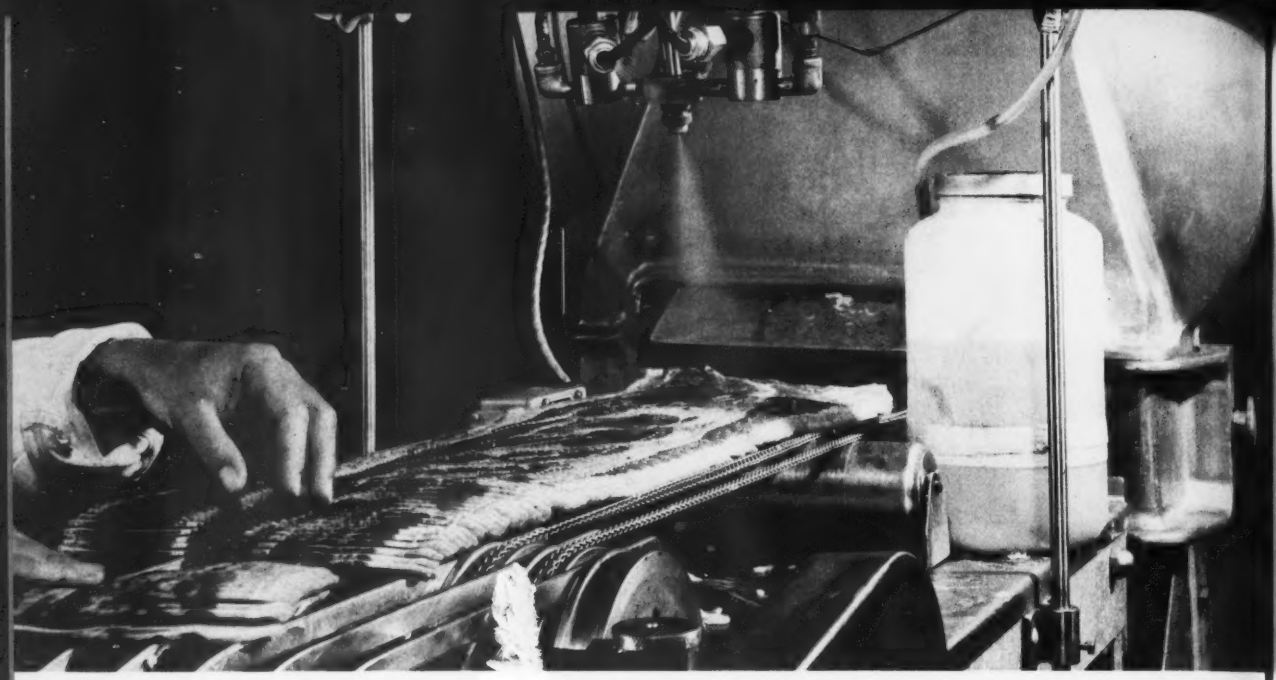
This bacon was protected with Pfizer Isoascorbic Acid

Every housewife wants to unwrap bacon that has the deep red, appetite-appealing color you see here. Isoascorbic Acid insures this better cure color, makes fresh-looking color last much longer in the showcase, too. Improve your bacon sales the easy, low-cost way. Cure with Pfizer Isoascorbic Acid.

Turn page for directions on how to use Pfizer Sodium Isoascorbate and Isoascorbic Acid. Mail coupon for free sample. ➡

Actual comparison photos taken after a day in the showcase under fluorescent lighting.





How to insure that your bacon is the one that goes home.

Protect the all-important eye-appeal of your meat products with Pfizer Isoascorbic Acid or Sodium Isoascorbate.

● You can extend the color-life and enhance the eye-appeal of sliced cured bacon simply by spraying with a water solution of Isoascorbic Acid or Sodium Isoascorbate.

Tests show that one gallon of a 10% Isoascorbic Acid solution applied as a spray will treat 10,000 pounds of bacon for only 2/100 of a cent per pound. The solution should be prepared fresh daily and stored in glass, enamel, aluminum, plastic, or stainless steel containers.

Pictured above is one of the various commercial spray installations available, which you can use for bacon and other cured meats.

You can also effectively use Sodium Isoascorbate during the curing of bacon, whether the stitch-pump, dry cure, or semidry-cure method is used in your production.

In the stitch-pump method, you add Sodium Isoascorbate at a level of 7½ ounces per 100 gallons of pickle. This level produces better initial color when the bacon is sliced and assures longer showcase life to "shingle-packed" bacon.

For the dry and semidry-cure methods, up to ⅞ ounce of Sodium Isoascorbate should be added to the curing salts used per 100 pounds of meat. Complete distribution of the Sodium Isoascorbate throughout the curing salts mixture is necessary or uneven cure-color may result.

Mail the coupon below for more details on how Pfizer Isoascorbic Acid and Sodium Isoascorbate can improve the sales-appeal of your meat products in the retailer's showcase.

BUILD SALES! MAIL THIS ACTION COUPON TODAY!

I want to see what ☐ Pfizer Isoascorbic Acid or ☐ Sodium Isoascorbate can do for my products. Please send me a work sample and include your Technical Bulletin 94—Pfizer Products for the Meat Industry, plus a convenient wall chart for preparing Isoascorbic solutions.

NAME_____

POSITION_____

COMPANY_____

STREET_____

CITY_____

CHAS. PFIZER & CO., INC. Chemical Sales Division 630 Flushing Avenue, Brooklyn 6, N. Y.
Branch Offices: Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.

Quality ingredients for the food industry for over a century

Pfizer

Science for the World's Well-Being

Score a Flavor Touchdown with

FRODEX®
CORN SYRUP SOLIDS

It's the flavor that "scores" with your customers! Keep the natural meaty goodness and the delicate spice flavors at their peak of tastiness by adding FRODEX (Corn Syrup Solids) to your sausages, canned and luncheon meats, bolognas, and frankfurters. You'll discover FRODEX also binds meat particles into a firm eating texture and stabilizes the moisture content to minimize shrinkage and watering-off. FRODEX also controls oxidation and guards against loss of appetizing natural color. Leading packers depend on FRODEX to make their meat products all-round winners.



1958 Packers Guide

See page J/Am

For full information, write to our Technical Sales Service Department

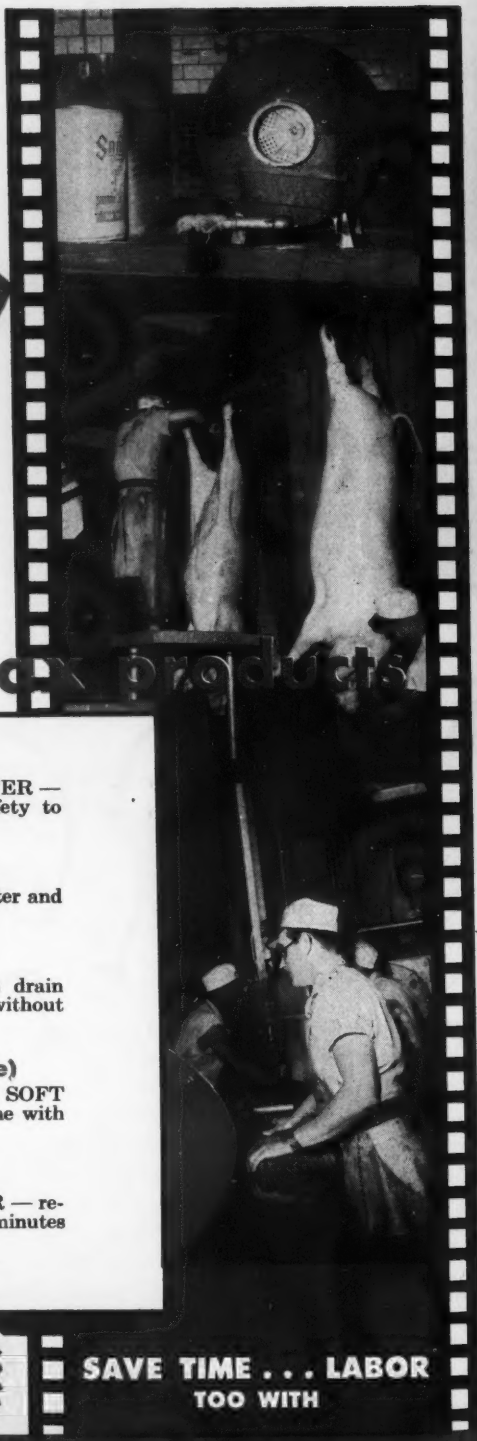
AMERICAN MAIZE-PRODUCTS COMPANY
250 PARK AVENUE • NEW YORK 17, N Y

ATLANTA • BOSTON • BROOKLYN • BUFFALO • CHICAGO
DENVER • FORT WORTH • GRAND RAPIDS • LOS ANGELES
MEMPHIS • PHILADELPHIA • PITTSBURGH • PORTLAND
ST. LOUIS • ST. PAUL • SAN FRANCISCO • SEATTLE

it's a matter of record

Meat Packers are saving dollars on production and clean-up

with Sanfax products



SANFAX GM-27

ALL-PURPOSE, FREE RINSING, CLEANER — quickly removes blood, grease, soils with safety to hands and equipment.

SANFAX TL-12

MIRACLE TRIPE CLEANER — cleans whiter and increases yield per load in record time.

SANFAX 222

REVOLUTIONARY CHEMICAL — clears drain lines and sewers of greases, trash and roots without costly production tie-ups.

SANFAX 822 (Concentrate)

EFFECTIVE DEHAIRING IN HARD OR SOFT WATER — cleaner, whiter hogs in record time with a minimum of material.

SANFAX S-21

EFFORTLESS SMOKE HOUSE CLEANER — removes hard incrusted smoke house residue in minutes and rinses free and clean.

For proof-positive mail coupon to National Provisioner or The Sanfax Company

ALL PRODUCTS UNCONDITIONALLY GUARANTEED

SAVE TIME . . . LABOR TOO WITH

NO OBLIGATION, OF COURSE

Tell me more about your effective Sanfax money-savers.

☐ Sanfax GM-27 ☐ Sanfax TL-12
☐ Sanfax 222 ☐ Sanfax 822
☐ Sanfax S-21

NAME_____

ADDRESS_____

The SANFAX Company

"Specialized Chemicals for the Meat Industry"

174 CENTRAL AVENUE, S. W., ATLANTA, GEORGIA

ATLANTA SAN FRANCISCO
CHICAGO TORONTO, CANADA

nothing *Lasts* like stainless!



and nobody builds stainless like KOCH

THERE IS A DIFFERENCE

All stainless steel equipment is not the same. Differences exist in weights and alloys, in details of construction and finishing. And above all, there are differences in the integrity and experience of the builder. Since Koch-built stainless costs no more —why not have the finest.

This Koch stainless-steel-top trimming table is typical of the quality and workmanship you get in every piece of Koch equipment. Notice the repeated K-shape in the tubular substructure. This Koch-designed feature provides greater strength, more positive rigidity, and convenient under-the-table storage for meat drums, sausage trucks, etc. The sturdy all-welded frame has leg levelers. One-piece metal top is fabricated from 14-gauge, #2-B satin finish stainless steel, with smooth rounded corners. Koch trimming tables are available with removable sectional maple cutting boards, or with longer-lasting U. S. Royal boards. Standard table lengths are 6, 8, 10, 12, and 14-ft. Other sizes can be custom-built to your exact requirements. Write for further information and prices.

KOCH EQUIPMENT CO.

2520 HOLMES STREET
KANSAS CITY 8, MO.
VICTOR 2-3788

KOCH ENGINEERS WILL WORK FOR YOU

Koch has the experience and production facilities to fabricate custom-built equipment economically. A competent Koch engineer will submit detailed drawings and quotations for your approval. This service is extended without charge or obligation. Write and tell us what you need.

NEW CHEVROLET TRUCKS FOR '59!





New Might! New Models! New Money-Saving Power!

Task-Force 59 brings you more to work and save with in every weight class—more models, thriftier engines, stronger cabs and frames, safer brakes, tougher axles and transmissions! Here's the longest, strongest line of Chevrolet trucks ever built, the best yet of the best sellers!

Good news in the light-duty class! Chevy's longer, stronger '59 line gives you a *dozen* big pickups to choose from . . . new 4-wheel drive models, newly fashioned panels, Step-Vans, and Sedan Deliveries! Scores of innovations include new hard-pulling Positraction rear axle, new bigger brakes, new stronger cabs, new broad-shouldered styling refinements!

Bright new middleweight and heavyweight might! New big-tonnage L.C.F. and conventional trucks are heftier than ever with new 5-speed transmissions, new huskier clutches, more durable rear axles in capacities as high as 18,000 lbs.! G.V.W.'s go up to 36,000 lbs. in tandems . . . and up to 21,000 lbs. in new Series 50H and 60H models with heavy-duty components!

New thriftier 6's, all-new V8 power! Chevy's best selling 6's are set to pinch pennies like never before with new camshaft design, new valve train durability! *Six* modern V8's are tougher built for bigger savings; an all-new V8, the 185-h.p. Workmaster Special* with advanced Wedge-Head design, is offered in Series 70 and 80! See 'em for yourself—the bright new trucks of Task-Force 59 at your dealer's now! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

**Optional at extra cost.*

CHEVROLET

CHEVROLET TASK·FORCE 59 TRUCKS

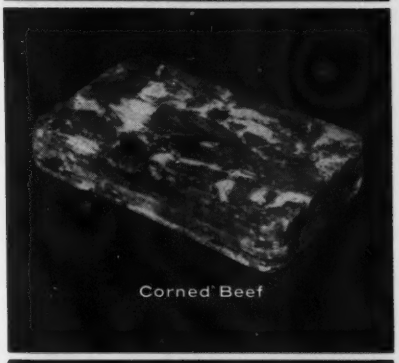
U. S. BERKEL CHALLENGES

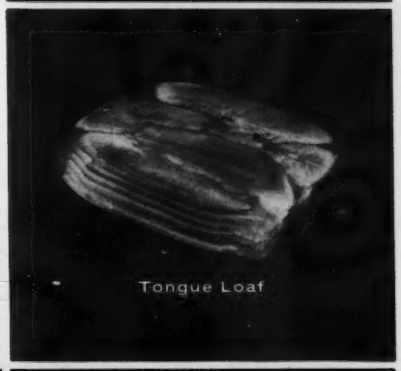
any competitive automatic slicer to match the slicing-and-stacking results pictured here...

...produced automatically by the Model 170-GS—without hand-straightening... ...with product sliced directly from holding cooler—no special tempering!

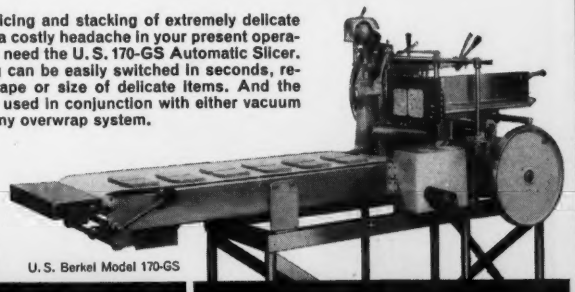
Unretouched photos


Boiled Ham


Corned Beef

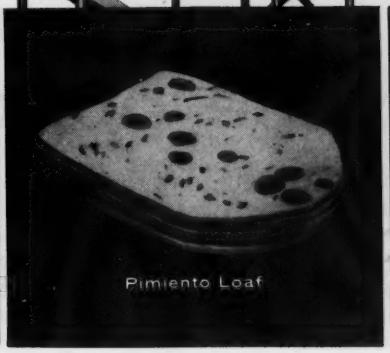

Tongue Loaf

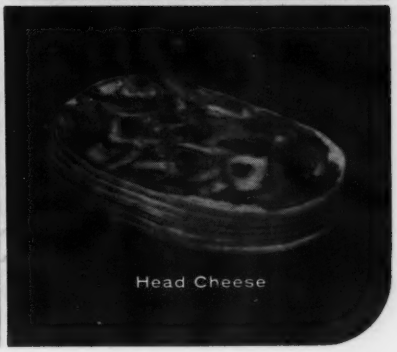
Is automatic slicing and stacking of extremely delicate meat products a costly headache in your present operation? Then you need the U. S. 170-GS Automatic Slicer. Product slicing can be easily switched in seconds, regardless of shape or size of delicate items. And the 170-GS can be used in conjunction with either vacuum packaging or any overwrap system.


U. S. Berkel Model 170-GS

Slices, counts, stacks, groups or shingles—*automatically!*


Neapolitan Loaf


Pimiento Loaf


Head Cheese

See your U.S. representative or send coupon today

US BERKEL

The VOLUME-RATED line of food machines and scales

OUR 60th YEAR

U.S. SLICING MACHINE COMPANY, INC., 1031 Berkel Bldg., LaPorte, Ind.

Rush complete information on ☐ U. S. Berkel 170-GS Automatic Slicer ☐ U. S. Berkel Model 170-SS Automatic Slicer-Scaler ☐ New U. S. Berkel Automatic Slicer-Interleaver.

NAME_____

ADDRESS_____



vacuum-packed in a flexible pouch!

This package matches a jar for keeping chipped beef fresh. And look how it works for sales, with its eye-appeal, brand identification, shopper convenience! Think how it simplifies package inventory, storage, and costs!

It's made from a lamination of cellophane, foil, and film made of BAKELITE Brand Polyethylene. The strong, inert lining of polyethylene film forms an airtight heat-seal that protects the full flavor and freshness of the beef.

There are many ways to use this economical transparent film in meat packaging—all of them profitable. It will pay you to talk to your packaging supplier or write Dept. JU-46M, Bakelite Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y. *In Canada:* Bakelite Company, Division of Union Carbide Canada Limited, Toronto 7.

It pays to package in film made of **BAKELITE** BRAND **POLYETHYLENE**

UNION CARBIDE

The terms BAKELITE and UNION CARBIDE are registered trade-marks of UCC.

"I save $1.96 on every 100 lbs. of my processed meats"



you, too, can save with

TIETOLIN

Reg. U.S. Pat. Office

UNIVERSALLY ACCEPTED AS THE LEADING ALBUMINOUS BINDER AND MEAT IMPROVER FOR 20 YEARS

Here's Proof of Savings!

IN YOUR 100 LB. EMULSION FORMULA

REPLACE	7 lbs. of BULLMEAT @ * 52½c lb.		$3.68
WITH	4 lbs. of Pork Trimmings @ * 20½c lb.	$0.82	$1.72
AND	3 lbs. of TIETOLIN @ ** 30c lb.	.90	
		SAVE	**$1.96**

*Sept. 12 quotations National Provisioner

**Depending on zone and quantity

try a sample drum . . .

Write or phone today!

Sole Manufacturers of the Famous

FLAVOR-LOK —Natural and Soluble Seasonings
VITAPHOS — Phosphate for Emulsion Products
VITA-CURAID—The Phosphate Compound for Pumping Pickle
TIETOLIN —Albumin Binder and Meat Improver
SEASOLIN —Non Chemical Preserver of Color and Freshness

1ST FIRST SPICE MIXING CO.

FIRST SPICE
Mixing Company, Inc.

NEW YORK 13, N. Y. — 19 Vestry Street
SAN FRANCISCO 7, CAL. — 185 Arkansas St.
TORONTO 10, CANADA — 98 Tycos Drive



Be sure and use

CUDAHY

NATURAL CASINGS

for every

SAUSAGE NEED

A variety of

79

DIFFERENT CASINGS

Cudahy produces 79 different kinds of beef, pork and sheep casings. You're sure to find the right casing for every sausage you make.

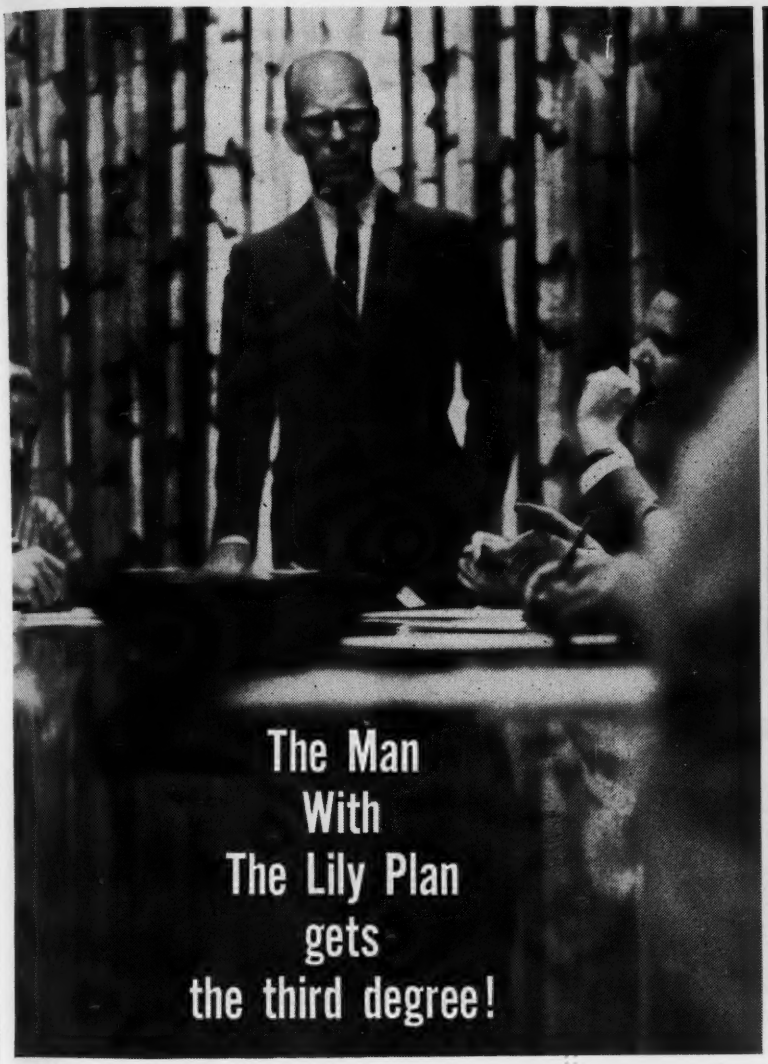
Every Cudahy casing is double tested — first for strength — then for uniform size.

Cudahy Natural Casings allow the smoke to penetrate deeply, seal in the wonderful juicy flavor and keep your product at peak of quality goodness.

A Cudahy Casing Expert is at your service to help you select the best casings for your products. Contact your Cudahy sales representative.

THE CUDAHY PACKING COMPANY

OMAHA, NEBRASKA





Result: Lard Tubs and Nestrite Containers that answer your packaging needs 7 ways!

Meat packers are continually searching for improved packaging methods, and questioning The Man With The Lily Plan can result in some profitable answers.

They're satisfied with Lily's reputation, but they want to know just how the Lily* lard tub stacks up against competition.

Q. *"Is it sturdy?"*

A. The Lily tub is so strong, you can stand on it . . . yet light in weight! It's non-corrosive, too!

Q. *"Is it easy to use?"*

A. The big, wide mouth makes it easier to fill. And, unlike heavier, clumsier containers, the Lily tub nests to save storage space prior to use. Stacks neatly after it's filled.

Q. *"Economical?"*

A. Less expensive than other types of containers; lightness reduces handling costs.

Q. *"How well does it protect our product?"*

A. The Lily tub is precision-made with an improved coating. Fine holding qualities minimize spoilage and dehydration.

Q. *"How about sizes?"*

A. For sales to hotels, restaurants, drive-ins and mass feeders, Lily makes 5 different sized tubs: 2, 3, 4, 5 and 10 lbs. For supermarkets: ½ lb., 1-lb., and 2-lb. Nestrites.

Q. *"Customer convenience?"*

A. Consumers prefer a round container. It's easier to spoon from and more convenient to store.

Q. *"Can our name be imprinted on these tubs?"*

A. They can be handsomely printed with your name, design and colors, or you may choose from our stock designs.

Valuable Information from Lily

The Man With The Lily Plan is constantly working to develop new products, improve old ones, and solve problems—for you. He has some valuable information on meat packaging—and it's yours without cost or obligation. Just write to: *Lily-Tulip Cup Corp., 122 E. 42 St., Dept. NP-108, New York 17, N. Y. *T. M. Reg. U. S. Pat. Off.*

Canned meats are so good...



CHILI—steaming hot, rich and tasty, brings real flavor to a meal!



LUNCHEON MEAT—and yams broiled in a casserole. Delicious quick meal!

so convenient...so expertly packed...



VIENNA SAUSAGES—and eggs for breakfast. Canned sausages add flavor to any meal.



HASH ROUNDS—baked and circled with crisp bacon. A tasty mealtime treat!

...in cans by CONTINENTAL



Because they're so good . . . so convenient . . . so expertly packed, canned meats are bought and enjoyed by three out of four American families. Prepared in any number of mouth-watering ways, canned meats add zest and wholesome nutritional values to the American diet.

CONTINENTAL CAN COMPANY

Eastern Division: 100 East 42nd Street, New York 17
Central Division: 135 South La Salle Street, Chicago 3
Pacific Division: Russ Building, San Francisco 4
Canadian Division: 5595 Pare Street, Montreal, Que.

GEBHARDT'S



AMERICA'S FIRST NAME in CONTROLLED REFRIGERATION SYSTEMS FOR THE MEAT INDUSTRY





GEBHARDT'S SERIES 100 CONTROLLED REFRIGERATION SYSTEMS

(OUT OF THE WAY—CEILING SUSPENDED)

Unsurpassed for beef aging coolers, beef holding coolers, beef shipping coolers, bacon holding coolers, veal chill and holding coolers, beef sales coolers . . . fresh pork coolers, curing cellars, ham coolers, offal coolers, sausage chill and holding coolers . . . lamb chill and holding coolers, sausage grinding and stuffing coolers, sausage meat coolers . . . smoked meat hanging rooms, lard coolers, poultry coolers, general cold storage rooms and loading docks.

Guaranteed to perform as below when installed and operated according to our instructions:

- **Produces any desired temperature as low as 28°.**
- **Produces an average relative humidity of 80 to 90%.**
- **Produces a continuous uniform gentle circulation—no blowing.**
- **Washes the air free from molds and bacteria.**
- **Requires minimum maintenance.**







Get a factory-performance guarantee!
Our engineering department will work with you or your architect in laying out your refrigerating equipment, and will absolutely GUARANTEE its performance

CONTROLLED TEMPERATURE · CONTROLLED CIRCULATION · CONTROLLED HUMIDITY · AIR PURIFICATION
Gebhardt
COLD AIR CIRCULATORS
PATENTED

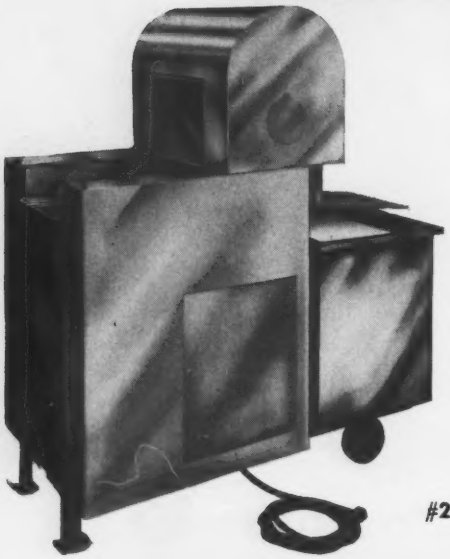
GEBHARDT'S CONTROLLED REFRIGERATION SYSTEMS

Manufactured by Advanced Engineering Corp.

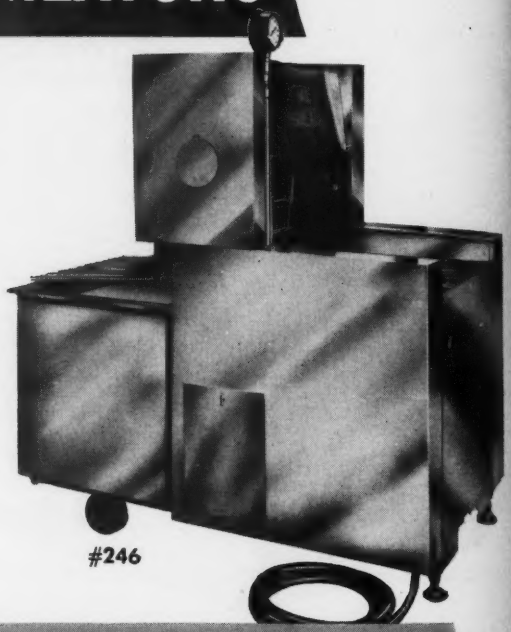
3625 WEST ELM STREET • MILWAUKEE 9, WISCONSIN

TELEPHONE: FLAGSTONE 2-2800

BOSS PATENTED PERMEATORS



#247



#246

★ NO MOVING TABLE TO CAUSE MAINTENANCE PROBLEMS!

★ CURE 240 TO 480 BELLIES PER HOUR. COMPACT! PORTABLE!

★ NO WEIGHT LOSS IN CURING. CONTROL COLOR AND FLAVOR!

★ CURE MEAT IN 24 HOURS, OR LESS, WITH YOUR FAVORITE CURE!

PERMEATES

BELLIES FOR SMOKING AND DRY SALTING, BONELESS PORK BUTTS, JOWLS, BACON SQUARES, FAT BACKS, BONELESS PORK LOINS (CANADIAN BACON), TONGUES, BEEF BRISKETS, BEEF BACON.

SAVES

STORAGE, SPACE, EQUIPMENT, INVENTORY, LABOR AND CURE.

PROFIT-MAKERS!

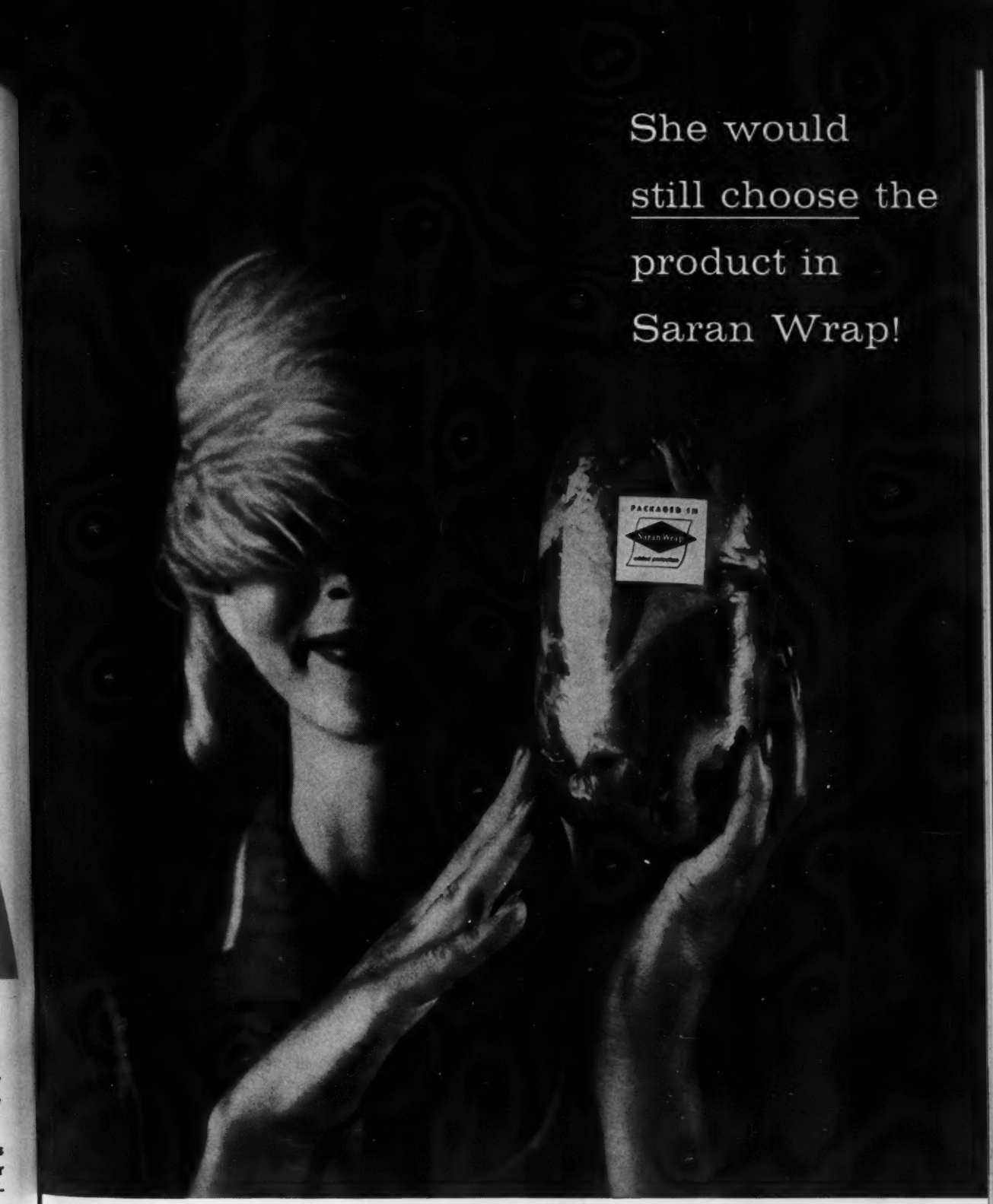
Boss Permeators are proven in performance . . . ideal for all cost-conscious operators. Stainless steel for easy, quick cleaning. A series of injections by stainless steel reciprocating needles perform the perfect permeation of pickle.

2 sizes available—No. 247 impregnates 240 bellies per hour—No. 246 impregnates 480 bellies per hour. A lift jack with 6" rubber tired wheels is available for easy movement of Permeator.

***FREE** personal instructions are provided when Permeator is delivered, assuring perfect mechanical operation.*

THE *Cincinnati* BUTCHERS' SUPPLY COMPANY
CINCINNATI 16, OHIO

58-B-3



When extra protection is important, shoppers rely on this hallmark.

One touch tells why! Naturally—because she likes the friendly touch of Saran Wrap*! Your product packaged in this crystal-clear, plastic film is pleasant to pick up and handle. It sparks more sales for you. And—it gives maximum protection all the while. Because Saran Wrap is moistureproof, it helps keep weight, flavor, color intact. It promotes that just-packed appearance shoppers prefer. Saran Wrap means fresher foods to millions of homemakers. Let Dow packaging service help put "sell" into your products, long range savings, too! Write THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Dept. 1730B.

*Trademark

YOU CAN DEPEND ON

DOW

(Advertisement)



'Old Smoky' summer sausage is now processed with ACCEL by Peters Meat Products. New starter culture has cut product failures and returns to zero.

Better Summer Sausage In Less Time Thanks to ACCEL®

Peters Meat Products of Eau Claire, Wis., and St. Paul, Minn., makes a summer sausage called 'Old Smoky'. And like all packers who produce summer sausage, they had their problems. The lengthy processing time limited their production capacity to one 5,000-lb. batch of 'Old Smoky' per week. They typically encountered spoilage, off-flavor, nonuniform color, poor texture, and nitrite burns.

These problems, shared by every summer sausage packer, are all attributable to chance fermentation according to AMIF research. The best way to beat this universal problem was to find a way of controlling the fermentation process. The answer proved to be a starter culture, developed by the AMIF and commercially produced by Merck & Co., Inc., under the name ACCEL.

Here's what happened when Peters started using ACCEL in 'Old Smoky'. Processing time was cut so sharply that they tripled output. They now produce three 5,000-lb. batches per week without expanding production facilities. Sam Pire and Adolf Remmele, Plant Superintendents, and other Peters officials report that ACCEL has resulted in considerable cost savings.

They are assured of constant uniformity in texture, flavor, and color. Returns and product failures have been cut to zero. Consumer acceptance of 'Old Smoky' has substantially increased—and Peters has enthusiastic letters to prove it. The people at Peters are sold on ACCEL.

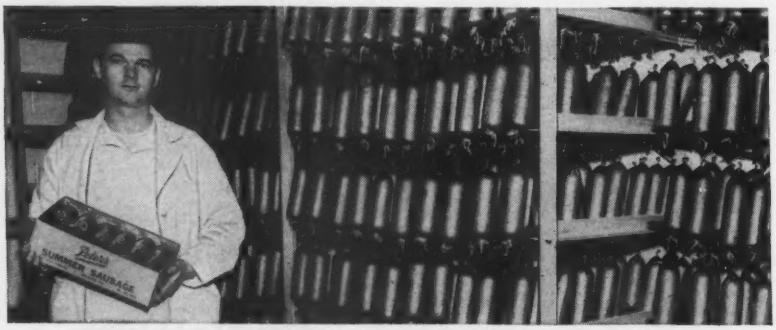
ACCEL offers important savings in money, time, and labor wherever it is used. It completely eliminates the 72-hour period of holding in the cooler and the 24-hour tempering period. It offers the surest way of producing a tangy, high-quality product with spoilage and failures held to a rock-bottom minimum. ACCEL is in convenient powder form to be introduced during the mixing process so that no new equipment is required.

ACCEL is MID approved for summer sausage, Lebanon, thuringer, cervelat, salami, and pork roll. *For free literature and samples, contact your local Merck representative or write directly to Department NP-1011.*

MERCK & CO., INC., Rahway, New Jersey

®ACCEL is the trademark of Merck & Co., Inc., for its brand of lactic acid starter culture.

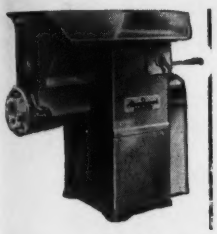
© Merck & Co., Inc.



Sam Pire, Plant Superintendent of Peters Meat Products, inspects a batch of 'Old Smoky' summer sausage processed in only 48 hours by using ACCEL.

The MATADOR SUPER GRINDERS *for* PROGRESSIVE PROCESSORS

THE BEST YET IN . . Fast Production with double screws and triple plates and knives . . . Continuous feed . . . Quality grind of Pork and Beef

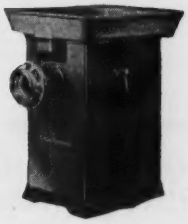


MATADOR SENIOR & JUNIOR GRINDERS

Large pitch feeder for continuous rapid grind. Has famous Matador principle of coarse and fine in one operation. Capacity up to 8000 lbs. per hour.

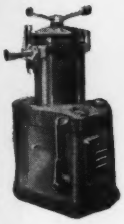


U. S. Pat. No. 2,661,040.



MATADOR JUNIOR GRINDERS

Produces unequaled quality, cool grind. Includes famous Matador principle of coarse and fine in one operation. Capacity up to 3000 lbs. per hour.



MATADOR HYDRAULIC STUFFERS

A self-contained unit in 65 lb., 100 lb. and 150 lb. capacity. Optional with linking attachment, hand operated or fully automatic.

EXCLUSIVE FEATURES

- MATADOR AWE-130 illustrated above has 10 h.p. motor and 5⅛" dia. plates for low cost high speed production.
- MATADOR triple plates and knives produce a coarse and fine grind in one operation.
- DIPLICO patented stainless steel self-sharpening knives and plates of long life are optional for more efficient operation.
- PRODUCES a dry shred grind for fine sausages and hamburger . . . no heating of product . . . no backing up.
- **AVAILABLE in several sizes with capacities up to 12,000 lbs. per hour.**
- IS IN CONTINUOUS operation by leading packers who report a superior grind for all their products.
- HAS ENORMOUS pitch hopper feeder for continuous grind.
- EJECTION LEVER quickly ejects knives and plates . . . easy to clean . . . motor totally enclosed.
- IMMEDIATE demonstration can be arranged at your plant . . . Convince yourself by operating the MATADOR high speed grinder.

DEALERS PROTECTED, OPEN TERRITORIES

(Phone, wire or write for a demonstration)



MATADOR SILENT CUTTERS

Advanced modern design with many exclusive safety and sanitary features. In 100 lb., 150 lb., 300 lb. and 550 lb. sizes. Self-emptying attachment optional.



U.S. Trade Mark

DIANA DICING MACHINES

CUTS STEW MEATS . . . FAT BACKS . . . SPECIALTIES . . . BEEF . . . LAMB . . . VEAL . . . CHICKEN AND OTHER FOODS . . . in uniform cubes of desired size.



MATADOR PORTABLE ROTARY MIXERS

Mixing bowls mounted on wheels . . . can be moved to any part of the plant . . . at the same time substitutes for hand trucks. In three different sizes.

C. E. DIPPEL & COMPANY, INC.

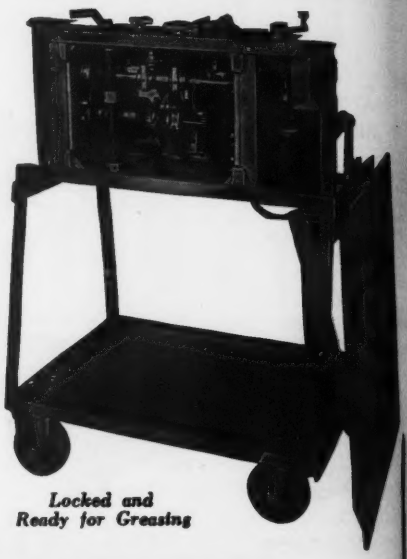
126 LIBERTY ST. **Phone REctor 2-0380** **NEW YORK 6, N. Y.**

Use a "TILT-TOP" TRUCK *with your* TY LINKER

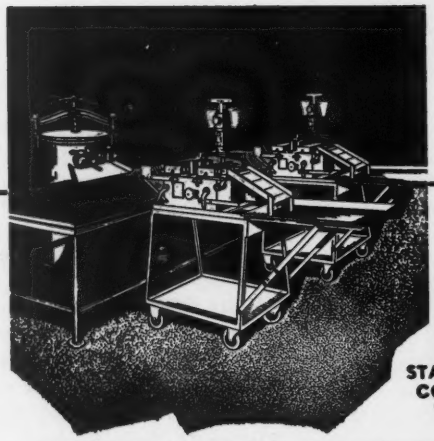
COMPLETE HANDLING OF PRODUCT FROM STUFFER TABLE TO SMOKE STICK



Locked and Ready for Operation



Locked and Ready for Greasing



STAINLESS STEEL CONSTRUCTION THROUGHOUT

- INCREASES TIME AND LABOR SAVINGS
- CORRECT HEIGHT FOR EFFICIENT FEEDING
- IDEAL FOR MULTIPLE MACHINE OPERATION
- BETTER ACCESSIBILITY TO ALL PARTS FOR EASY CLEANING AND LUBRICATION
- EASY ONE-HAND MOTION FOR MACHINE TILTING
- CONVENIENT, ADJUSTABLE EXTENSION PAN
- TY LINKER SECURELY BOLTED AND CRADLED
- BOTTOM SHELF FOR TOOLS AND PARTS
- PERFECT FOR PERMANENT LOCATION
- SELF-LOCKING DEVICE FOR SMOOTH TILTING
- EQUIPPED WITH LARGE SWIVELED CASTERS
- SIZE—68" LONG—33" HIGH—24" WIDE

LINKER MACHINES, INC.

39 DIVISION STREET • NEWARK 2, NEW JERSEY

OVER 3000 TY LINKERS IN DAILY OPERATION

Distributor and Service Organization for Europe, Great Britain and North Africa . . . SEFFELAAR & LOOYEN, 90 Waldeck Pyrmontkade, The Hague, Holland. Telephone 392263.

BREAK AWAY!

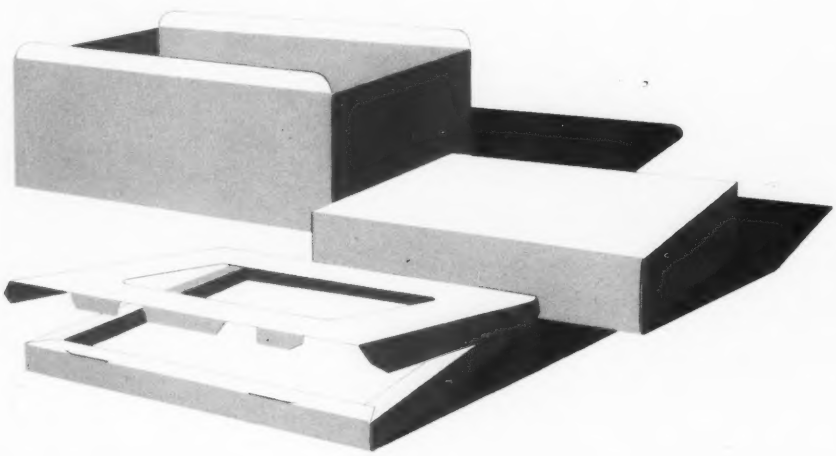
FIBREBOARD packaging for meats

Your meats travel better, **economically,** in Fibreboard containers. Corrugated and solid fibre shipping cases. Folding cartons of every size and style. Bacon trays and boards. Sausage containers. Table-ready meat specialties. Frozen meat packages.

Advantages? You get many when you're served by the West's largest manufacturer of paperboard packaging. Your cartons and cases are faultlessly printed on the newest modern presses. You receive market and package research . . . structural and graphic design . . . equipment development and counsel . . . dependable supply and service. And people . . . experienced people near you to work with you.

SERVICE OFFICES: **Billings, Boise, Chicago, Denver, Fresno, Los Angeles, New York, Oakland, Omaha, Phoenix, Portland, Sacramento, Salt Lake City, San Diego, San Francisco, San Jose, Seattle, Stockton, Yakima.**

FIBREBOARD
Paper Products Corporation
Head Office: San Francisco



pink *and* plump

extra-bright pink bloom and savory flavor



1938 Housing Guide

See page J/Ma

See those pink plump beauties in the pan? That's what we mean! MAYER'S NEW WONDER PORK SAUSAGE SEASONING gives you the finest attributes of natural spices and soluble seasonings to provide extra-bright pink bloom and a fine, full flavor. Ask the "man from Mayer" or write for batch-size test sample. Just tell us the size of your production block and whether you want regular strength, light sage, no sage, or southern style.

SPEAKING OF SAGE

Our sage is the finest Yugoslavian quality; perfect silvery leaves from the world's best crops, grown along the Dalmatian coast. Of course, we pay more for these cleaner, fresher colored leaves. But they alone, of all the world's sage, translate into the perfect sage flavor for our blends.

H. J. MAYER & SONS CO., INC.

6813 South Ashland Avenue • Chicago 36, Illinois

Plant: 6819-27 South Ashland Avenue *In Canada:* **H. J. Mayer & Sons Co. (Canada) Limited, Windsor, Ontario**

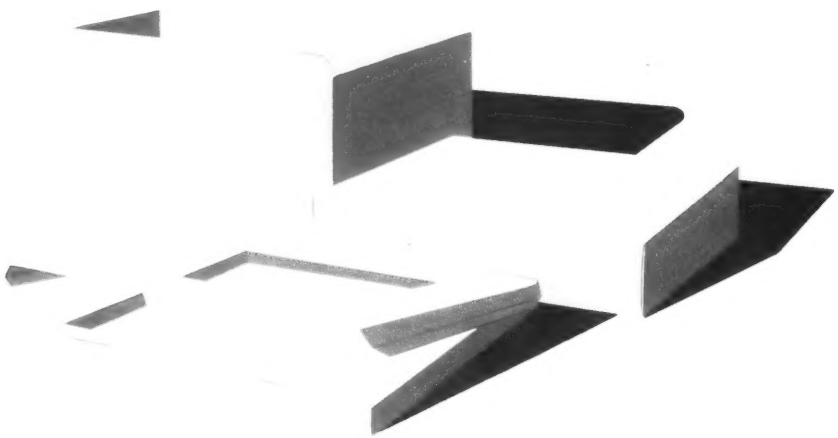
FIBREBOARD packaging for meats

Your meats travel better, **economically,** in Fibreboard containers. Corrugated and solid fibre shipping cases. Folding cartons of every size and style. Bacon trays and boards. Sausage containers. Table-ready meat specialties. Frozen meat packages.

Advantages? You get many when you're served by the West's largest manufacturer of paperboard packaging. Your cartons and cases are faultlessly printed on the newest modern presses. You receive market and package research . . . structural and graphic design . . . equipment development and counsel . . . dependable supply and service. And people . . . experienced people near you to work with you.

SERVICE OFFICES: **Billings, Boise, Chicago, Denver, Fresno, Los Angeles, New York, Oakland, Omaha, Phoenix, Portland, Sacramento, Salt Lake City, San Diego, San Francisco, San Jose, Seattle, Stockton, Yakima.**

FIBREBOARD
Paper Products Corporation
Head Office: San Francisco



and plump

extra-bright pink bloom and savory flavor



1958 PURCHASING GUIDE

See page J/Ma

See those pink plump beauties in the pan? That's what we mean! MAYER'S NEW WONDER PORK SAUSAGE SEASONING gives you the finest attributes of natural spices and soluble seasonings to provide extra-bright pink bloom and a fine, full flavor. Ask the "man from Mayer" or write for batch-size test sample. Just tell us the size of your production block and whether you want regular strength, light sage, no sage, or southern style.

SPEAKING OF SAGE

Our sage is the finest Yugoslavian quality; perfect silvery leaves from the world's best crops, grown along the Dalmatian coast. Of course, we pay more for these cleaner, fresher colored leaves. But they alone, of all the world's sage, translate into the perfect sage flavor for our blends.

H. J. MAYER & SONS CO., INC.

6813 South Ashland Avenue • Chicago 36, Illinois

Plant: 6819-27 South Ashland Avenue *In Canada:* **H. J. Mayer & Sons Co. (Canada) Limited, Windsor, Ontario**

Because we're our own toughest customer...

HORMEL

is the word for GELATIN!

NO one could be fussier about gelatin than Hormel. We need exactly the right kinds, the highest quality for our famous canned hams and loaf products.

WE insist on just the right strength gelatin for easy slicing. We demand sparkling clarity, too. And we require exactly the right gelatin for each type of product.

SO, to get what we want in gelatin . . we produce it. We make gelatin for ourselves, *and for other packers.* (Matter of fact, ours happens to be the only gelatin plant within a meat inspection plant.)

IF you are also a "tough customer", we'd like to serve you. We'll be happy to share with you the experience we've gained in our years as both producer and user of gelatin.

For more information, write

GEO. A. HORMEL & CO., Austin, Minn.

HORMEL

Another Mepaco FIRST!

HAM MOLD 4" x 4" x 27"



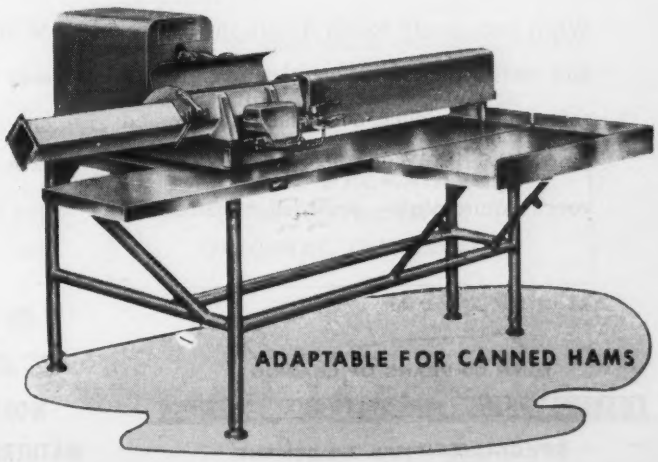
TO ACCOMMODATE HAMS WITH GREEN WEIGHT OF 22 POUNDS

Mepaco's new 4" x 4" x 27" mold will accommodate a larger ham; or a medium ham; or even two 8/10 hams. Pieces and scraps may be used, also. Mepaco molds are available in cross section dimensions of 3⅞" or 4" or 4½" square; and in length up to 27". In all Mepaco molds you get these exclusive features:

- **Finished product is firm; no soft ends**
- **Location of fat is controlled**
- **There are no air or jelly pockets**
- **Shrinkage is less due to shorter, uniform cooking time**
- **Uniform slice yield is 5% higher**

MEPACO HAM FORMER

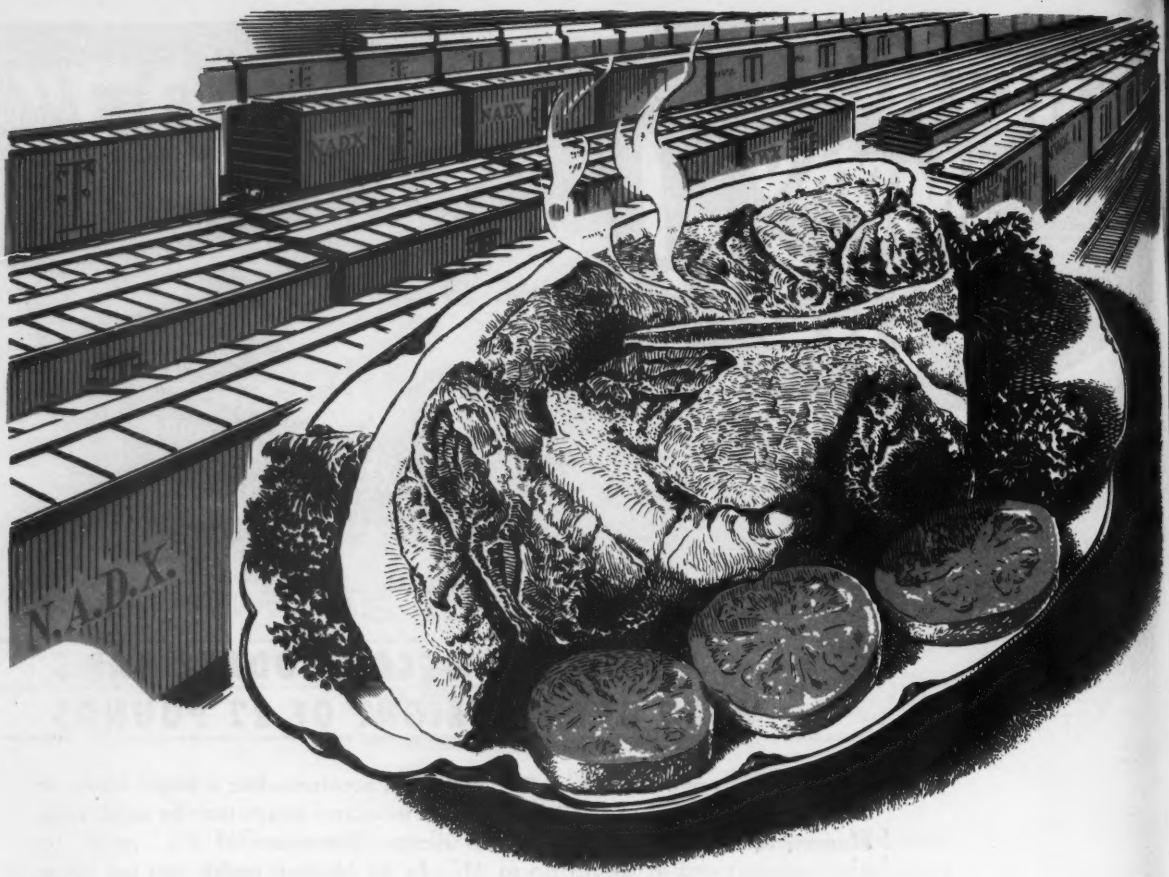
A Mepaco mold of appropriate size is positioned on loading horn. A seamed and fatted ham is placed in forming chamber with fat located as desired. Press a valve and ham is squared instantly. Press a lever and squared ham is forced into mold. Release a clamp and mold is removed from horn. The complete operation requires less than 30 seconds. Polyethelene bag may be used on horn.



ADAPTABLE FOR CANNED HAMS

Mepaco MEAT PACKERS EQUIPMENT CO.

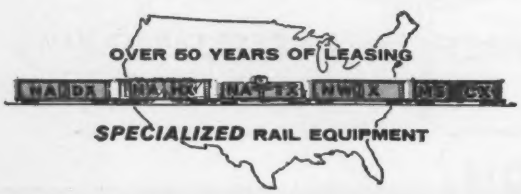
Telephone KElog 2-1655 · 1226 - 49th Avenue, Oakland 1, California



Know your shipment's going safe ...THE NORTH AMERICAN WAY!

When you specify North American refrigerator cars you take advantage of modern shipping techniques, dependable service and North American's very special knowledge of your requirements—knowledge gained in 50 straight years of experience in refrigerated transportation and service to the meat industry.

Ship to any market—with *safe* refrigeration by North American.



NORTH AMERICAN CAR CORPORATION

NORTH WESTERN REFRIGERATOR LINE COMPANY

MATHERS HUMANE STOCK TRANSPORTATION COMPANY

231 South LaSalle Street, Chicago 4, Illinois

A NATIONWIDE ORGANIZATION WITH BRANCH OFFICES IN IMPORTANT MARKET CENTERS

DALLAS • FOND DU LAC • ST. PAUL • ST. LOUIS • TULSA • SAN FRANCISCO • NEW YORK

Why **ROCHE*** *l*-Ascorbic Acid Sodium *l*-Ascorbate Coated *l*-Ascorbic Acid are better for your meats



ANTIOXIDANT — PROTECTING COLOR AND FLAVOR

l-Ascorbic Acid is vitamin C, one of nature's antioxidants. It reacts with, and uses up, oxygen, thus protecting the natural color and flavor of the processed foods in which it is used.

BENEFITS TO YOU

When Roche *l*-ascorbic acid, sodium *l*-ascorbate, or coated *l*-ascorbic acid are used in smoking or curing your meats, you:

- secure reliable, desirable color
- cut smokehouse time
- retard fading under retail display lights
- reduce shrinkage
- always produce more uniform cures

PROTECTION

Roche *l*-ascorbic products have proved their protective value for sausage products, corned beef, hams, bacon, frankfurters, pickled pig's feet. No matter what type of processing you use — smoking, pickling, spraying — pure, low cost *l*-ascorbic acid, sodium *l*-ascorbate, or coated *l*-ascorbic acid from Roche will help you better your product, your sales, and your profits.

MORE REASONS FROM ROCHE

- You can count on Roche for quick delivery from convenient warehouse points at Chicago, Atlanta and Dallas. (Normal transportation is prepaid.)
- You benefit from the all-time low price for Roche *l*-ascorbic products now in effect.
- You insure a steady supply by buying from Roche. Production in tonnage quantities is the rule at Roche Park.
- You should naturally come to Roche, long a leader in vitamin research and production — "headquarters" for information about other vitamins, too, such as vitamin A, and the safe, sure, yellow, pure food coloring — beta carotene.
- You get technical help in overcoming processing problems from Roche. Roche gives you practical assistance from professionals.

ROCHE PACKAGING PROTECTS ORIGINAL CONTENTS

*Roche — Reg. U. S. Pat. Off.

FREE TECHNICAL BROCHURE

Send for your copy of 24-page brochure illustrated in full color. No charge or obligation. It's packed with help for you.

VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

NUTLEY 10, N. J.

Pacific Coast distributors: L. H. BUTCHER COMPANY, SAN FRANCISCO
LOS ANGELES • SEATTLE • PORTLAND • SALT LAKE CITY

In Canada:

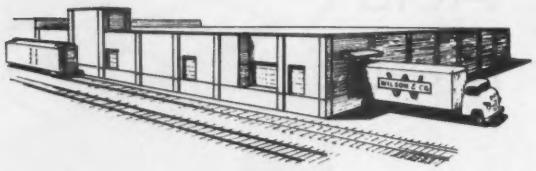
HOFFMANN-LA ROCHE LTD., 1956 BOURDON STREET.
ST. LAURENT, MONTREAL 9, P. Q.



SHIPPING & OFFICE ADDITION
SMITHFIELD PACKING CO.
SMITHFIELD, VIRGINIA



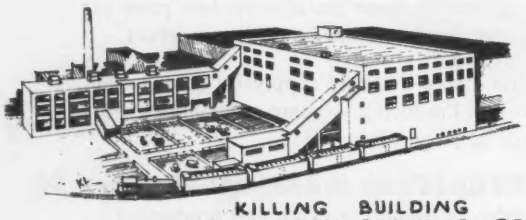
CALF SLAUGHTERING PLANT
AMERICAN STORES COMPANY
GREENCASTLE, PENNSYLVANIA



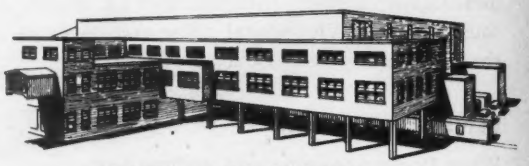
SHIPPING COOLER ADDITION
WILSON & CO. INC.
ALBERT LEA, MINN.



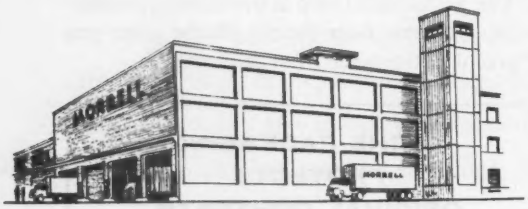
PROVISION PLANT.
HYGRADE FOOD PRODUCTS INC.
MONTREAL, CANADA



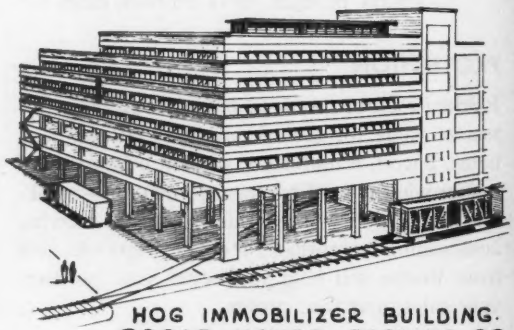
KILLING BUILDING
THE CUDAHY PACKING CO.
WICHITA, KANSAS



PLANT ADDITIONS
DUBUQUE PACKING CO.
DUBUQUE, IOWA



BRANCH HOUSE
JOHN MORRELL & CO.
LOS ANGELES, CALIFORNIA



HOG IMMOBILIZER BUILDING.
OSCAR MAYER PACKING CO.
DAVENPORT, IOWA

Recent work by . . .

RECENT WORK
BY

HENSCHIEN, EVERDS & CROMBIE

Architects & Engineers
Since 1914

59 East Van Buren Street, Chicago 5, Illinois • Phones: WAbash 2-1263 — WAbash 2-1264



What you should know about oxidative deterioration of edible and inedible fats

What is oxidative deterioration?

Oxidative deterioration of animal fats is caused by the reaction of oxygen in the air with the unsaturated portion of the fat molecule. This reaction produces free peroxide radicals which, in turn, appear to trigger a lengthy chain reaction, resulting in the formation of a variety of aldehydes, ketones and acids. Once started, the breakdown cannot be reversed. In fact, if allowed to continue, it proceeds at an increasing rate.

Why is it important to animal fat processors?

Oxidative deterioration, unless checked, rapidly makes its presence known in the form of rancidity. Nothing destroys the marketability of fats so quickly as the pungent, tallowy odor and flavor characteristic of rancidity.

How can you control oxidative deterioration?

Oxidative deterioration can be controlled effectively with antioxidants. Added to oxygen-sensitive fats, these compounds step in to check the rancidity-producing chain reaction referred to above. Since the reactions leading to rancidity cannot be reversed, antioxidants can only prevent further deterioration. Hence, it is essential they be added as early in the processing of the fat as possible.

Which antioxidant is best for you?

The principal antioxidants in use today are butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), and propyl gallate. All are available from Eastman, alone or in solution formulations containing various combinations and ratios of BHA, BHT and propyl gallate, with or without a metal chelating agent.

The most effective and economical formulation for use in any given fat depends upon such factors as the type of animal fat, how it is processed, the ultimate use of the fat, method of distribution and storage, and type of packaging. Advice and assistance in selecting the best formulation for your specific requirements is available from the Eastman food laboratories.

Where are these antioxidants available?

Marketed under the trade name TENOX, these antioxidants and the experienced technical service which backs up their proper use are available from Eastman Chemical Products, Inc., subsidiary of Eastman Kodak Company, Kingsport, Tennessee.

Tenox **Eastman antioxidants for animal fats**

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tenn.; New York; Framingham, Mass.; Cincinnati; Cleveland; Chicago; Houston; St. Louis. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle; Denver; Phoenix. **Canada: P. N. Soden Co., Ltd.,** Montreal, P.Q.; Toronto, Ontario.

US RUBBER CONVEYOR BELTS

Take it from Little Giant...

"White is right ...on sight!"



The clean, sparkling good looks of the U.S. Little Giant® Food Belt make it the ideal conveyor belt for inspecting meats. The food is sharply visible, imperfect items can be instantly spotted. The belt gives a big boost to employee morale and efficiency, too—makes a fine impression on visitors.

White is right—on sight.

The U.S. Little Giant Belt is easy to clean. It does not absorb foreign matter, hence never becomes rancid or moldy. Non-porous, odorless, non-contaminating.

There's a U.S. Little Giant conveyor belt for every branch of the food industry—in the right color for the highest working efficiency—for example, black, orange, green and white are stocked. Other colors available if required. We will recommend the right color for your belt's inspection line.

• • •

When you think of rubber, think of your "U.S." Distributor. He's your best on-the-spot source of technical aid, quick delivery and quality industrial rubber products.

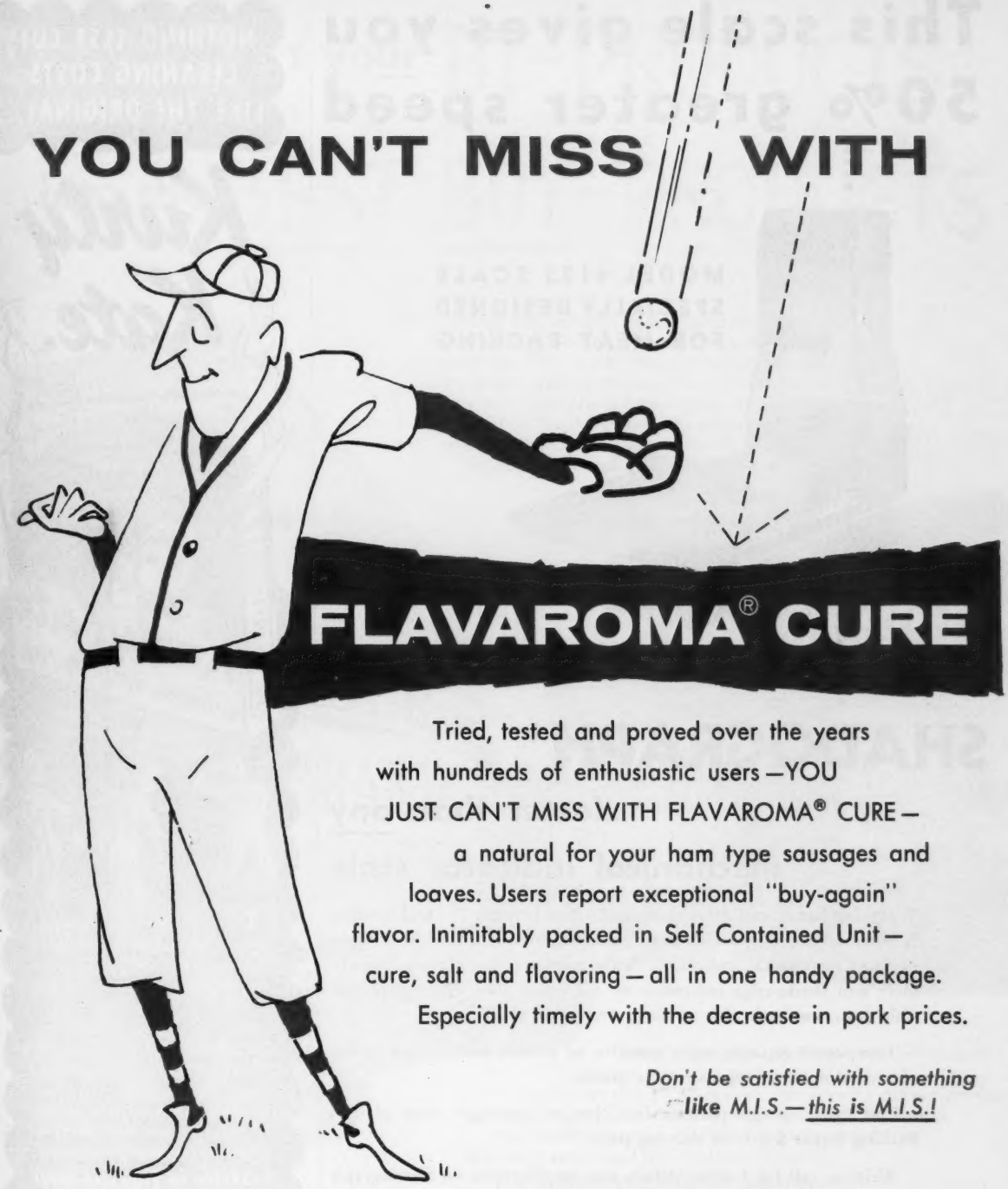
US RUBBER Mechanical Goods Division

United States Rubber

WORLD'S LARGEST MANUFACTURER OF INDUSTRIAL RUBBER PRODUCTS

Rockefeller Center, New York 20, N.Y. In Canada: Dominion Rubber Company, Ltd.

YOU CAN'T MISS WITH



FLAVAROMA® CURE

Tried, tested and proved over the years with hundreds of enthusiastic users—YOU JUST CAN'T MISS WITH FLAVAROMA® CURE—a natural for your ham type sausages and loaves. Users report exceptional "buy-again" flavor. Inimitably packed in Self Contained Unit—cure, salt and flavoring—all in one handy package. Especially timely with the decrease in pork prices.

Don't be satisfied with something like M.I.S.—this is M.I.S.!

Processing formulas are available on request. Sample drum sent on approval with the usual M.I.S. guarantee

MEAT INDUSTRY SUPPLIERS

NORTHFIELD, ILLINOIS



Creators and manufacturers of fine food seasoning

This scale gives you 50% greater speed



MODEL 4133 SCALE SPECIALLY DESIGNED FOR MEAT PACKING

SHADOGRAPH®

...faster than any mechanical indicator scale

Weighing bacon and other packaged meats is faster . . . and reading is more accurate . . . with this Shadograph scale. A beam of light replaces mechanical indicators. Scale comes to rest almost immediately and shado-edge indication on a frosted glass dial makes possible fast, unmistakeable readings from any angle.

Two-pound capacity scale sensitive to 1/40th ounce. Two inches of indicator travel represent one ounce.

End tower design permits free flow of packages over platter. Packing house finish on moving parts.

Write or call for further details and specifications on Shadograph . . . the scale that can cut your weighing time as much as 50%.

Exact Weight SCALES

THE EXACT WEIGHT SCALE CO.

915 W. FIFTH AVE., COLUMBUS 8, OHIO

In Canada: P.O. Box 179, Station S, Toronto 18, Ont.

Find us in your local "Yellow Pages"

Sales and Service Coast to Coast

BETTER QUALITY CONTROL . . . BETTER COST CONTROL

NOTHING ELSE CUTS CLEANING COSTS LIKE THE ORIGINAL...

Kurly Kate.



Try the *original* Kurly Kate metal sponge. See how it quickly and thoroughly wipes away the most stubborn dirt. *Remember* it will not splinter or rust—never cuts hands—never injures metal or plated surfaces, thus adding life to equipment. Then you'll know why the original Kurly Kate tops all metal sponges for safety—efficiency, economy and speed.

Available in Stainless Steel
Special Bronze
Stainless Nickel Silver

FOR ALL PACKING HOUSE AND SAUSAGE MFG. EQUIPMENT

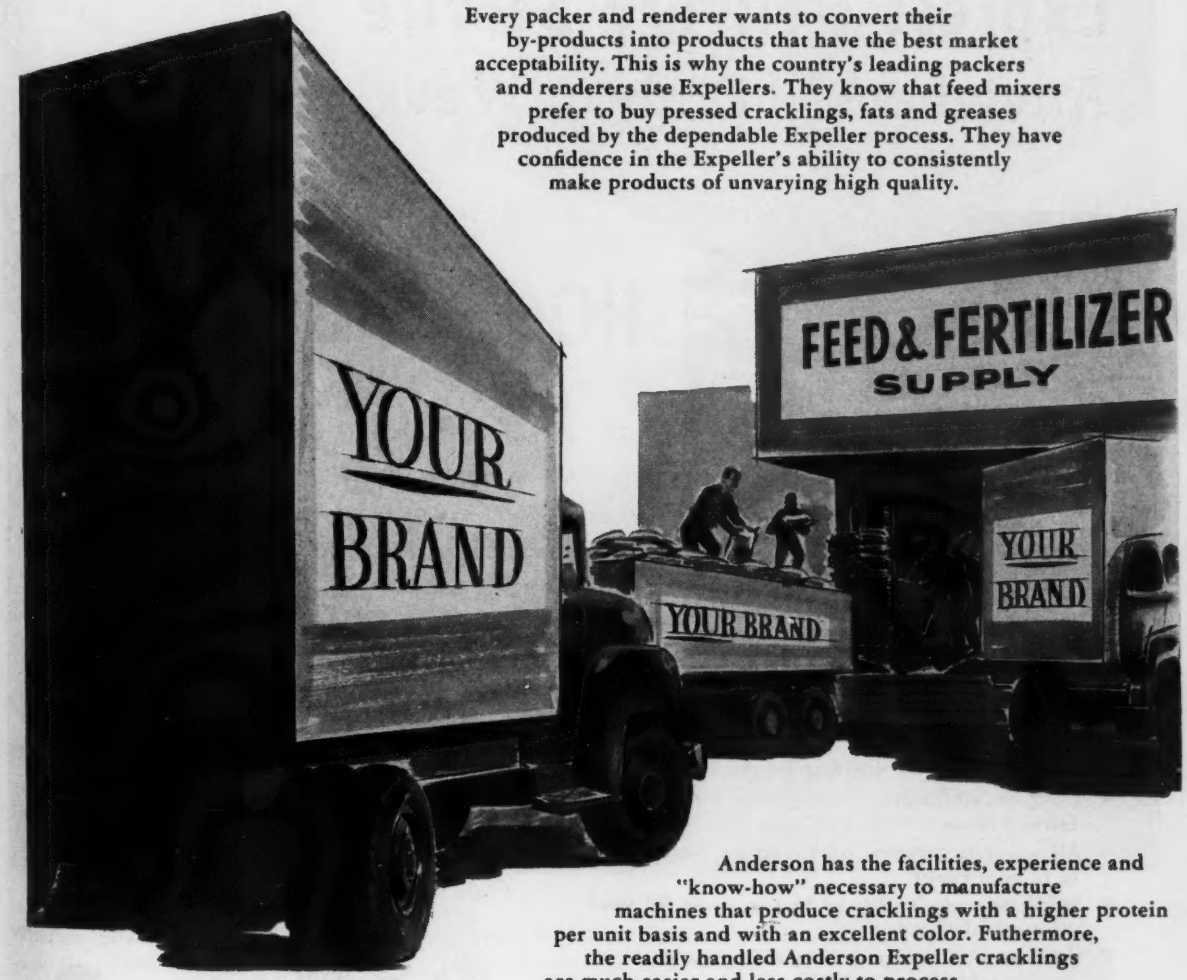
Guarantee Satisfaction fully guaranteed. Use proves its worth or your money back.

Order From Your Jobber or Write Direct to:

KURLY KATE CORP.
2215 S. Michigan Ave.
Chicago 16, Ill.

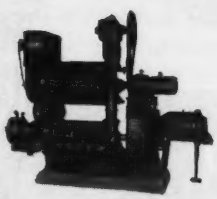
Convert your BY-PRODUCTS into the BEST BUY-PRODUCTS

Every packer and renderer wants to convert their by-products into products that have the best market acceptability. This is why the country's leading packers and renderers use Expellers. They know that feed mixers prefer to buy pressed cracklings, fats and greases produced by the dependable Expeller process. They have confidence in the Expeller's ability to consistently make products of unvarying high quality.



Anderson has the facilities, experience and "know-how" necessary to manufacture machines that produce cracklings with a higher protein per unit basis and with an excellent color. Futhermore, the readily handled Anderson Expeller cracklings are much easier and less costly to process.

You, too, will find Anderson Expellers the way to convert your BY-PRODUCTS into the BEST BUY-PRODUCTS! Write for Anderson's Crackling Expeller Catalog today!



1958 Purchasing Guide

See page F/An

THE V. D. ANDERSON COMPANY
division of International Basic Economy Corporation
1965 WEST 96th STREET • CLEVELAND 2, OHIO

Only ANDERSON makes EXPELLERS!



Express Delivery Service

Anywhere . . . Daily or Weekly . . . from the



WORLD'S MOST MODERN HOG SLAUGHTERER

LOW COST PORK PROCESSING

An ultra-modern, single-purpose plant designed solely to slaughter and dress shipper hogs economically. Killing capacity of 600 hogs per hour . . . Cooler capacity of 5,000 dressed carcasses.

CALL 5-8051
SIOUX CITY, IOWA
AND ASK FOR:



Get Better Quality for Less!
Here's why:

- **Hand splitting — assuring brightness of bone**
- **CO-2 immobilization — minimum internally bruised hams**
- **All weights: Butchers and sows — flexibility to fit your needs**
- **Two-way radio-equipped buyers — to fill your "last minute" orders**
- **Uniformity of carcasses — yielding your desired cuts**
- **Pork Variety Meats, frozen or fresh, boxed and ready-to-go — packed to your specifications**
- **Uniform and positive chilling — maximum bloom and freshness**



Sioux City Dressed Pork Inc.

1200 Swift Road SIOUX CITY, IOWA Teletype SY55

Find the firm going places...you'll find FIRESTONES!



Whether you operate one truck or twenty, you'll find that Firestone's truck tire costs less per mile. Billions of miles of carefully kept fleet records prove it.

Firestone has always built extra strength and long life into every Firestone truck tire. Now, even greater strength and longer wear are being built into Firestone truck tires through the use of Firestone Rubber-X and Firestone S/F (Shock Fortified) cord.

No wonder that, now more than ever, more truck operators are changing over to Firestone tires. Ask about Firestone Rubber-X at your Firestone Dealer or Store. That's the place for fast dependable service, too.

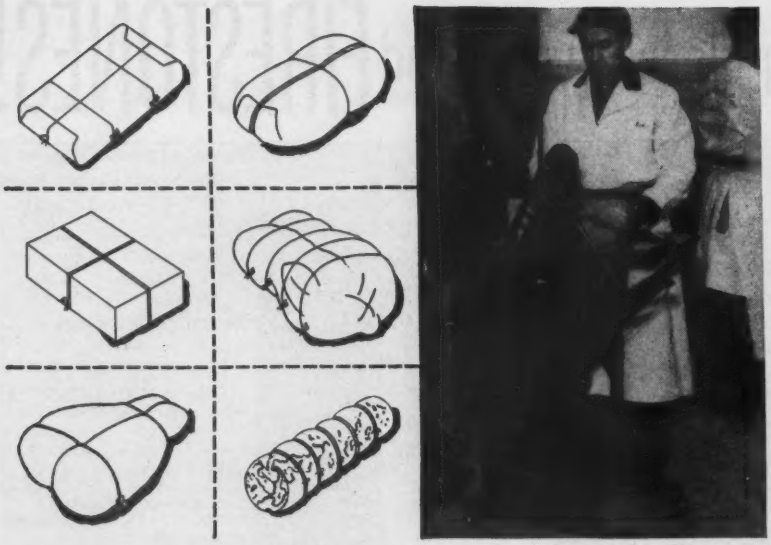


TRANSPORT® SUPER ALL TRACTION®

Firestone

BETTER RUBBER FROM START TO FINISH

Copyright 1958, The Firestone Tire & Rubber Company
Enjoy the Voice of Firestone every Monday evening on ABC television



TIE IT better, faster by machine

Bunn Tying Machines "have paid for themselves a dozen times over" at Grill Meats, Inc., Sandusky, Ohio

On any given day, the variety of meat specialties handled by nationally-known Grill Meats, Inc., may number 150 types or more. But regardless of size or shape, every cut is individually boxed . . . then neatly tied on a Bunn Tying Machine!

Says Mr. Sam S. Stein, President, "Bunn Tying Machines are as vital to our operation as knives or saws. They've paid for themselves a dozen times over in labor savings alone!"

Ties anything. Fully documented, this report typifies the savings *you* may realize with Bunn automatic tying. Hams, slabs, rolled and boxed meats of all kinds: yes, *anything* you now tie by hand can be tied faster, neater and better on a low-cost Bunn Machine.

Operation is simple, positive. You just position your meat, then step on a trip. Automatically, you get a tight, uniform tie . . . in 1½ seconds or less! Faster than hand tying? About 10 times. And remember: the Bunn Tying Machine is completely mobile — you roll it where you need it!

Send today for full data on how Bunn automatic tying can cut costs for you. Use the handy coupon.



BUNN

PACKAGE TYING MACHINES
Since 1907

B. H. BUNN CO., 7605 Vincennes Ave., Dept. NP-108, Chicago 20, Ill.
Export Department: 10406 South Western Ave., Chicago 43, Ill.

MAIL COUPON NOW FOR MORE FACTS

GET THE WHOLE STORY
Send today for this fact-packed booklet, which illustrates the many advantages of Bunn Tying Machines.
Or let a Bunn Tying Engineer show you.
No obligation.

B. H. BUNN CO., Dept. NP-108
7605 Vincennes Ave., Chicago 20, Ill.

☐ Please send me a copy of your free booklet.
☐ Please have a Bunn Tying Engineer contact me.

Name_____
Company_____
Address_____
City_____ Zone____ State_____

HUNTER CARGO COOLERS



for truck refrigeration in the medium and down-to-zero temperature ranges



MODELS H-30 AND HE-30
for down-to-zero, multiple-drop operations

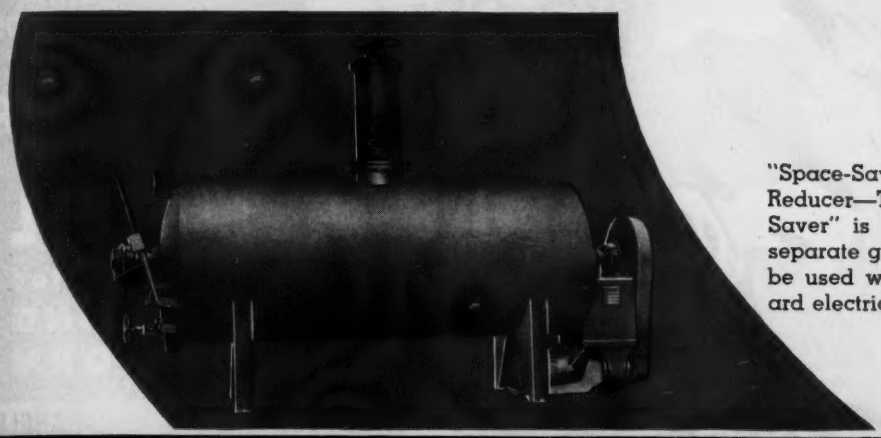
MODELS H-20 AND HE-20
for medium temperature, multiple-drop operations

- hydraulically driven
- thermostatically controlled
- light weight — permit bigger payloads
- compact — occupy less cargo space
- more refrigeration per pound of weight
- easily installed, easily serviced
- lowest initial cost
- economical to operate and maintain
- optional electric standby power
- positive dependability
- long work life
- full year warranty

Write for literature on models to fit your specific requirements.



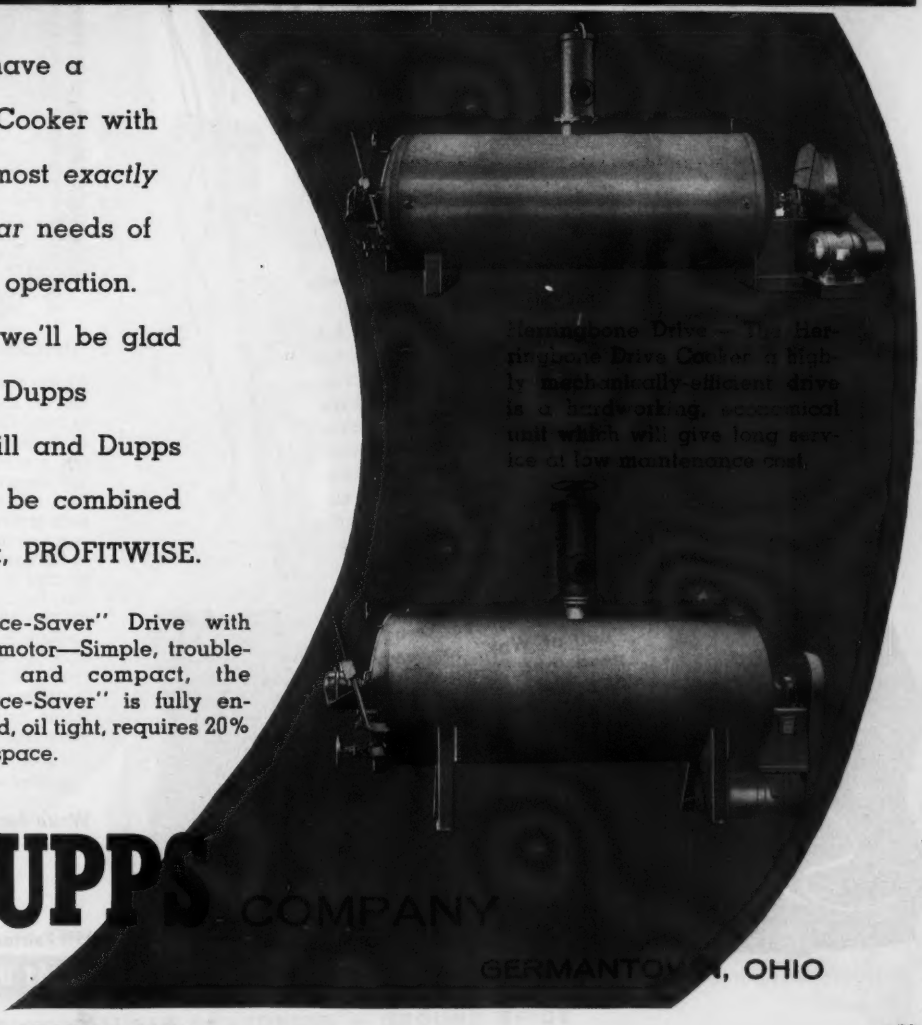
HUNTER MANUFACTURING CO
30525 AURORA RD.
SOLON, OHIO
TRANSPORT HEATING AND REFRIGERATION



"Space-Saver" Drive with Gear Reducer—The Dupps "Space-Saver" is now available with separate gear reducer that can be used with your own standard electric motor.

THE RIGHT COOKER TO FIT YOUR NEEDS

Now you can have a famous Dupps Cooker with the drive that most *exactly* fits the *particular* needs of your rendering operation. Drop us a line we'll be glad to discuss how Dupps Engineering Skill and Dupps Equipment can be combined for your benefit, PROFITWISE.



Herringbone Drive — The Herringbone Drive Cooker a highly mechanically-efficient drive is a hard-working, economical unit which will give long service at low maintenance cost.

"Space-Saver" Drive with Gearmotor—Simple, trouble-free, and compact, the "Space-Saver" is fully enclosed, oil tight, requires 20% less space.

THE DUPPS COMPANY

GERMANTOWN, OHIO

WE SELL FASTER IN EYE-APPEAL BAGS!



COTTON SAUSAGE BAGS OF ALL TYPES

with

* **EYE-APPEAL** designs and color
* **SELL-APPEAL** quality cotton
* **IMMEDIATE** service and delivery

Standard maintains a full staff of artists—a varied selection of stock prints to save you money—and makes immediate deliveries. This complete service is just one of the benefits you receive at Standard Bag . . . Standard offers you a quality product that has consumer appeal . . . appeal that helps you sell your product. This is the complete "Ball of Wax" service you need and require. Write our sales department today for full particulars. No obligation, of course.

Standard QUALITEX BAGS

Standard BAG COMPANY

TELEPHONE WAlnut 3-7618 • P. O. BOX 1052 • HOUSTON, TEXAS

SAW, WASH or SHROUD

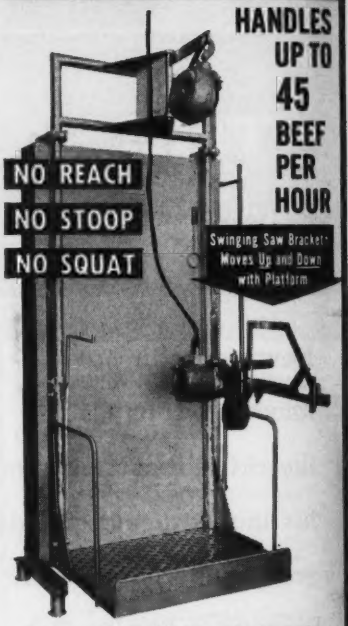
35% FASTER

with

LeFIELL

Floor Mounted

ELEVATING PLATFORM



HANDLES UP TO 45 BEEF PER HOUR

Descends with speed of sawing

Designed for sawing with single rail system, or washing and shrouding with all systems. The Le Fiell Floor Mounted Elevating Platform quickly pays for itself by cutting production time and worker-fatigue. Self-supporting unit is easily mounted to floor, requiring minimum head room. Connects to plant air line. Platform lifts to 52" in six seconds, ascending and descending on ball bearing wheels. Down speed can be adjusted to operator's requirements. Auxiliary Pull Chain allows quick descent when desired. Standard size Le Fiell non-slip platform is 33" x 42". (Other platform sizes can be supplied). Regularly finished galvanized. (Exposed surfaces are available in stainless steel for easier cleaning). Top quality materials for heavy-duty service. Guaranteed performance.

**For washing and shrouding, platform is supplied without swinging saw bracket.*

Write for full information

LeFIELL COMPANY

1465N Fairfax Ave. • San Francisco, Calif.

MEAT INDUSTRY EQUIPMENT



You name it...

STANGE

will season it better!

. . . because with Stange, seasoning is both a science and an art: Science —in processing the basic seasonings: Art—in the application of these seasonings to your products to achieve distinction in their field for flavor and eye-appeal.

STANGE

TALENT TO CREATE

SKILL TO PRODUCE

FLEXIBILITY TO FIT YOUR NEEDS

WM. J. STANGE CO., Chicago 12, Ill. • Paterson 4, N. J. • Oakland 21, Calif.
Canada: Stange-Pemberton, Ltd., Toronto, Ont. • Mexico: Stange-Pesa, S.A. Mexico City

50-A MICROGROUND SPICE • NDGA ANTIOXIDANT
CREAM OF SPICE SOLUBLE SEASONING • GROUND SPICE
PEACOCK BRAND CERTIFIED FOOD COLOR

Printed in U. S. A.



a new foam plastic insulation of outstanding properties

Uni-Crest is an extremely lightweight homogeneous white material with a smooth, tough surface. It is composed of minute, individually closed cells, produced by expanding beads of polystyrene. The inherent properties of Uni-Crest make it an excellent low temperature insulating material.

Uni-Crest has a low K factor (thermal conductivity) and retains its insulating value indefinitely. Lightweight, strong, flexible, it has excellent bonding characteristics, is non-dusting and non-flaking, and can be cut and handled easily. Uni-Crest is inexpensive, too.

Write today for complete specifications and installation information on application of Uni-Crest to your specific problems. We will be happy to send you this, plus an actual sample of Uni-Crest.

UNI-CREST DIVISION UNITED CORK COMPANIES
Since 1907

UNITED'S UNI-CREST EXPANDED POLYSTYRENE

5 Central Avenue, Kearny, New Jersey

BRANCH OFFICES OR APPROVED DISTRIBUTORS IN ALL KEY CITIES

SPECIALISTS IN PACKING PLANT LAYOUT AND DESIGN

25 YEARS EXPERIENCE IN THE MEAT PACKING INDUSTRY

BELASKAS and ASSOCIATES
Meat Industry Architects and Engineers
728 West Chicago Ave., East Chicago, Indiana
Indiana Phone, Expert 7-1372 Chicago Phone, Regent 1-6422

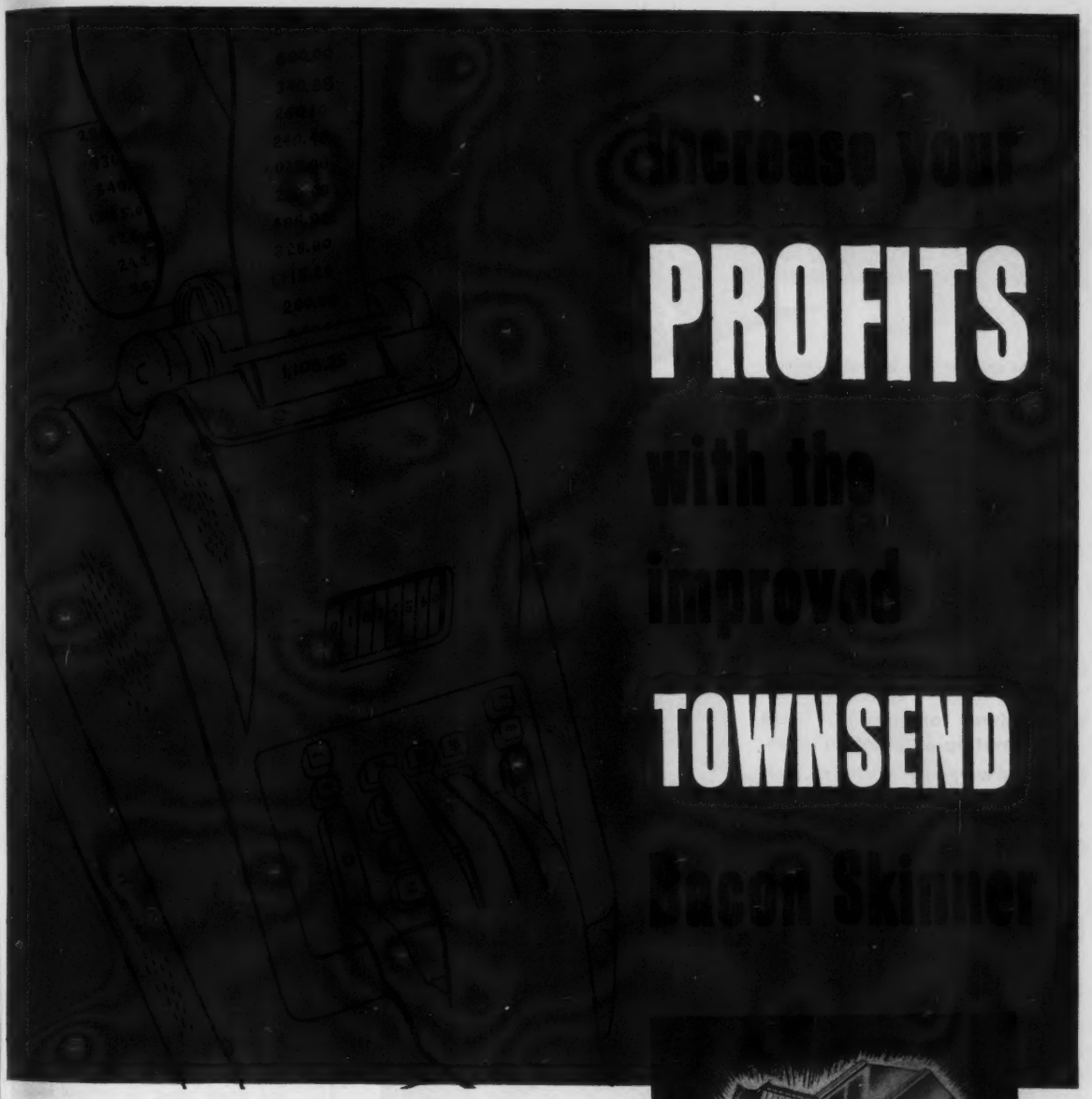
CITY PRODUCTS DIVERSIFIED ACTIVITIES CORPORATION

Store with **CITY PRODUCTS**

NATIONWIDE REFRIGERATED WAREHOUSE DIVISIONS

CLEVELAND, OHIO FEDERAL COLD STORAGE
COLUMBUS, OHIO FEDERAL COLD STORAGE
DECATUR, ILL. POLAR SERVICE
GALVESTON, TEXAS GALVESTON ICE AND COLD STORAGE
HORNELL, N. Y. CITY PRODUCTS CORPORATION
JERSEY CITY, N. J. SEABOARD TERMINAL & REFRIG.
KANSAS CITY, KANS. FEDERAL COLD STORAGE
NATIONAL STOCK YARDS, ILL. NORTH AMERICAN COLD STORAGE
PHOENIX, ARIZONA CRYSTAL ICE & COLD STORAGE (Two Warehouses)
PITTSBURGH, PENNA. FEDERAL COLD STORAGE
ST. LOUIS, MO. FEDERAL COLD STORAGE CO.
ST. LOUIS, MO. MOUND CITY ICE & COLD STORAGE CO.
SIOUX CITY, IOWA FRANK PILLEY & SONS
SPRINGFIELD, MO. SPRINGFIELD ICE & REFRIGERATING (Two Warehouses)
TUCSON, ARIZONA ARIZONA ICE & COLD STORAGE
TULSA, OKLA. TULSA COLD STORAGE

GENERAL OFFICES
CITY PRODUCTS CORPORATION
33 S. Clark St. Chicago 3, Ill.



Increase your

PROFITS

with the improved

TOWNSEND

Bacon Skinner



To increase profits under today's competitive conditions, requires the most modern equipment — equipment like the improved Model 52A Townsend Bacon Skinner.

On this machine, the mechanism has been greatly improved to hold maintenance to a minimum. The new feeding arrangement helps reduce the human element by automatically feeding the bacon slab at exactly the right instant. This increases production, reduces trimming and hence improves the yield.

No other method approaches the Townsend for close-cutting, high-yield performance. From bellies of any average, Townsend assures 1% higher yield — and frequently delivers as high as 3%.

Write for complete information. And also ask about the Townsend Pork-Cut Skinner and the Townsend Ham Fatter — a team that brings you extra profits.

TOWNSEND

ENGINEERING COMPANY

2421 HUBBELL AVENUE, DES MOINES, IOWA

V 139 15 OCT 58 UMI



Another interesting Wendway installation. Twin flights of wide belt Wendway operate continuously between production stations to convey air filters to inspection stations.

Here's what WENDWAY can do for You!

Wendway can be your "silent partner" by conveying any light products weighing 20 lbs. or less, swiftly and silently from one operation to the next. Wendway conveying systems are completely sanitary . . . safe for operators, too! Wendway will carry your products overhead, through walls, upstairs or down—to any place you want them. Wendway will eliminate wasted manpower, unnecessary handling and boost production all along the line. Standardized powered straight sections, curves, switches, etc., are operated by remote control and easily adjusted to required speeds. Wendway will smooth out your assembly processing, packing or inspection problems and pay for itself in time and equipment saved.

Remember . . .

- **Wendway answers your 'light product' conveying problems.**
- **Wendway complies with even the most rigid sanitation codes.**
- **Wendway synchronizes perfectly with other production line equipment.**
- **Wendway increases production line profits.**



Wendway belting will not damage even the most delicate of products. Automatic conveying assures products of cleaner, fresher, neater appearance.



Overhead cooling for cooked or heated products saves you time and floor space. Wendway takes 'em up, cools 'em off and brings them down—automatically!



Cartons, fragile packages, etc., are completely safe on Wendway. Smooth, silent travel delivers products in perfect shape, clean and fresh in appearance.



Write today for additional information, literature and specifications to match your conveying requirements.

Gentlemen:
Please have your area distributor contact me at once.

*Name*_____ *Title*_____

*Company*_____

*Address*_____

*City*_____ *Zone*__ *State*_____

*The product to be conveyed is*_____

UNION STEEL PRODUCTS CO., Albion, Michigan

PROVISIONER "APPROVED" BOOKS

The books listed below are selected from a number of sources. In the opinion of the editors of The National Provisioner they are factual, practical and worthwhile —and are approved and recommended accordingly.

MEAT SLAUGHTERING AND PROCESSING

Contains information helpful to small slaughterer or locker plant operator interested in killing and meat processing. Discusses: fundamentals; plant location and construction; beef slaughter and by-products; hog slaughter; inedible rendering, casing processing; lard rendering; track installations; curing; smoking and sausage manufacture.
Price ..... $5.

FREEZING OF PRECOOKED AND PREPARED FOODS

This 560-page volume has 24 chapters and 124 illustrations. Included are processing instructions for food technologists, quality control people, packers, home economists and restaurateurs. Book is devoted exclusively to the production, freezing, packaging and marketing of baked goods, precooked and prepared foods.
Price $10.00

FREEZING PRESERVATION OF FOODS

Covers all frozen foods comprehensively. Includes principles of refrigeration, storage, quick freezing, packaging materials and problems; specific comment on preparation and freezing of meats, poultry, fish, other items. Complete discussion through marketing, cooking, serving, transportation. 31 chapters, 282 pictures. 1214. pages.
Price $18.00

HIDES & SKINS

A comprehensive work on rawstock for leather, covering takeoff, curing, shipping and handling of hides and skins; these subjects are discussed by experts in packinghouse hide operations, chemists, tanners, brokers and others based on lectures sponsored by National Hide Association. Jacobsen Publishing Co.
Price $9.75

MEAT PACKING PLANT SUPERINTENDENCY

General summary of plant operations not covered in Institute books on specific subjects. Discusses plant locations, construction, maintenance, power plant, refrigeration, insurance, operation controls, personnel controls, incentive plans, time keeping, safety.
Price $4.50

ACCOUNTING FOR A MEAT PACKING BUSINESS

Designed primarily for smaller firms which have not developed multiple departmental divisions. Discusses uses of accounting in management, cost figuring, accounting for sales.
Price $4.50

PORK OPERATIONS

A technical description of all pork operations from slaughtering through cutting, curing smoking, and the processing of lard, casings and by-products. Institute of Meat Packing.
Price $4.50



Specialists

—in the Art of creating fine food formulas

—and in the Science of faithfully repeating them.

Such are the skills, with Integrity of Quality, that distinguish Griffith products.

Griffith

THE GRIFFITH LABORATORIES, INC.

CHICAGO 9, 1415 W. 37th St. • UNION, N. J., 855 Rahway Ave. • LOS ANGELES 58, 4900 Gifford Ave.



DRY-SYS

AIR CONDITIONED

SMOKEHOUSES

"Dry-Sys" Smoke Houses will give you the BEST in the art of smoking meats.

IN DESIGN: Simplicity of adjustment and operation—ease of cleaning—uniformity of product—consistent performance.

IN CONSTRUCTION: All parts fabricated of quality materials and finest workmanship to assure sturdiness and durability.

NOTE THESE FEATURES: Fully automatic temperature and humidity control—Minimum shrinkage of products—Thorough distribution and circulation of ample volume of smoke through product—Suspended cages or floor trucks may be used—no floor obstructions—Tight, insulated panel construction on rigid structural steel framing—Custom built to fit your floor space by DRY-SYS engineers.

YOU CAN DEPEND ON DRY-SYS SMOKEHOUSES

WRITE OR PHONE FOR DETAILS TODAY

DRY-SYS Equipments CHICAGO

DRYING SYSTEMS CO.

Division of Thor Power Tool Company

Engineers • Contractors • Manufacturers

1815 Foster Avenue Chicago 40, Illinois

phone ARdmore 1-9100

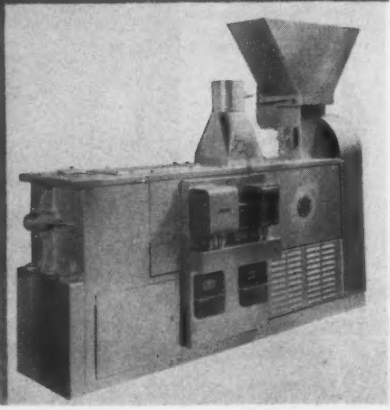
DRY-SYS

SMOKE GENERATOR

NEW — DIFFERENT!

This is the Smoke Generator you have been waiting for. Here are some of the OUTSTANDING features:

- Uses DRY sawdust. No need to dampen or mix.
- Plenty of heavy, flavorful smoke for 2 - 4 cage houses.
- Sawdust is metered and fed mechanically.
- Sawdust is charred to ashes with electric heat.
- Automatic temperature control on electric heaters.
- Easy to install. Floor space required—24" x 72".
- Simple starting and stopping. Just turn switch on or off. No wasted sawdust.



TO ALL

EUROPE

Choice of De luxe, First, Tourist or Economy Class Service

FLY

LUFTHANSA

WHERE EFFICIENCY AND SERVICE ARE TRADITIONAL

SEE YOUR TRAVEL AGENT or Lufthansa German Airlines

555 Fifth Ave., N.Y. 17

111 Broadway, N.Y. 6

MUrray Hill 2-9100

OUR RELIABLE HOG MARKETS

IN BUSINESS FOR 29 YEARS

19 HOG MARKETS in ILLINOIS AND IOWA

DAILY MARKET

+ + +

GALESBURG ORDER BUYERS, INC.

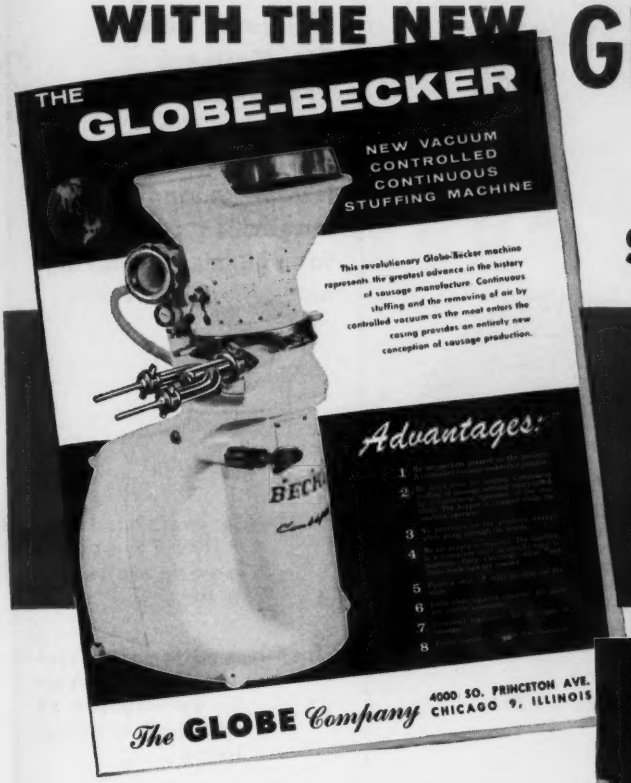
MAIN OFFICE

C. B. & Q. STOCK YARDS

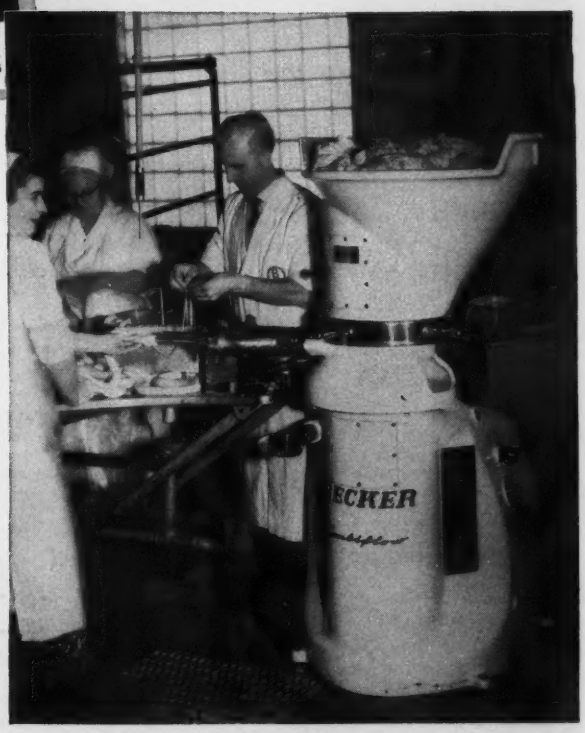
Phone: DIckens 2-2112

GALESBURG, ILLINOIS

CONTINUOUS STUFFING WITH THE NEW GLOBE-BECKER VACUUM CONTROLLED STUFFING MACHINE



Send for this Free Catalog Today!



WITH THESE ADVANTAGES:

- ★ Fast, Continuous Operation
- ★ Air-free Product with Controlled Vacuum
- ★ Product Improvement
- ★ Ease of Cleaning
- ★ Economy of Operation and Maintenance
- ★ Complete Safety
- ★ Easy Installation

This revolutionary Globe-Becker machine represents the greatest advance in the history of sausage manufacture Continuous stuffing and the removing of air by controlled vacuum as the meat enters the casing provides an entirely new conception of sausage production

Globe equipment is now available through "NATIONWIDE" leasing program

THE GLOBE COMPANY
4000 S. PRINCETON AVE., CHICAGO 9, ILLINOIS



to merchandise your product

FOOD WRAPPERS of *Non-Toxic — Pure White — vegetable parchment*

DESIGNED To make your brand attractive and outstanding

AND PRINTED With colors that make your product appetite appealing

We have the facilities to make your moist-food wrapper.
Why not have us design a wrapper for you?

WEST CARROLLTON PARCHMENT COMPANY
West Carrollton, Ohio

SALES OFFICES: New York, 99 Hudson St. • Chicago, 400 W. Madison St.

SERVING THE FOOD INDUSTRY SINCE 1896

West Carrollton
GENUINE VEGETABLE
Parchment

BUTTER WRAPPERS	FISH FILLET WRAPPERS & INSERTS	VEGETABLE SHORTENING CARTON LINERS	BUTTER BOX LINERS
BUTTER TUB LINERS & CIRCLES	LINERS FOR MEAT TINS	TRI-WRAP & DUO-WRAP FOR SMOKED MEATS	BAKERY PAN LINERS
MILK CAN GASKETS	POULTRY WRAPPERS	BACON WRAPPERS	RELEASE PARCHMENT
MEAT WRAPPERS	SAUSAGE WRAPPERS	MARGARINE WRAPPERS	MASTER PARCHMENT
POULTRY BOX LINERS	CHEESE WRAPPERS	CAKE DECORATORS	GREETING CARD PARCHMENT
LARD CARTON LINERS	TAMALE WRAPPERS	CELERY WRAPPERS	AUTOCLAVE PARCHMENT
GIBLET WRAPPERS			PARCHMENTIZED KRAFT

SILICONE • MYCOBAN • QUILON & DRY WAXED PARCHMENT
CLEAN FOOD PAPER—For Delicatessen and Grocery Stores, also Fish and Meat Markets.

For over 65 years now, The National Provisioner has been the undisputed leader among magazines published for the meat packing and allied industries.

First*— *in everything that helps to make a good magazine great . . .

***First*— in editorial content - - editorial service - - in number of pages - - in advertising . . .**

***First*— to report industry news - - to interpret accurately the news and business trends . . .**

***First*— to report the markets and prices . . .**

***First*— in service to packer, processor and advertiser alike.**

THE NATIONAL PROVISIONER

"FIRST IN THE FIELD"

Spicene

SEASONING SERIES

77

IT'S A NATURAL

SPICENE COMPANY OF AMERICA, INC., NO. BERGEN, N. J.

PLASMAL • SPICES • SEASONINGS • BINDERS

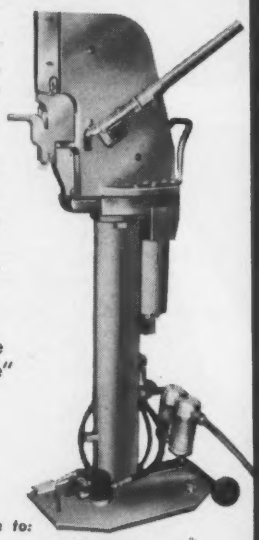
NEW "BENCH-TIE"

PROTECTED BY PAT. #2,735,149 AND #2,840,852

THE *Only* MACHINE THAT 2ND TIES *All* ARTIFICIAL CASINGS INCLUDING *Cellulose*

Newly designed and produced versatile "Bench-tie" machine is the result of 6 years of research and development plus exhaustive field-testing . . . all customer evaluation tests are completed . . . we can now assure you of complete satisfaction.

- Proven 40% labor saving and 75% production increase
- Versatile . . . Pre-ties all casings with or without hanger loop
- Ideal for pressurized smoke butt operation
- Fast, simple cloth bag closure
- Mobile - moves easily from Department to Department
- Puncture-free, positive seal, low cost "Vac-Tie" fasteners are perfect for large or small operations



Write for complete information to:

Vac-Tie
FASTENERS, INC.
1140-1146 E. JERSEY ST. ELIZABETH 4, NEW JERSEY

CENTRAL
Accessible to producers,
Convenient for packers,
Low buying costs.

LIVESTOCK
Regular marketings,
Liberal supplies,
Wide choice of livestock.

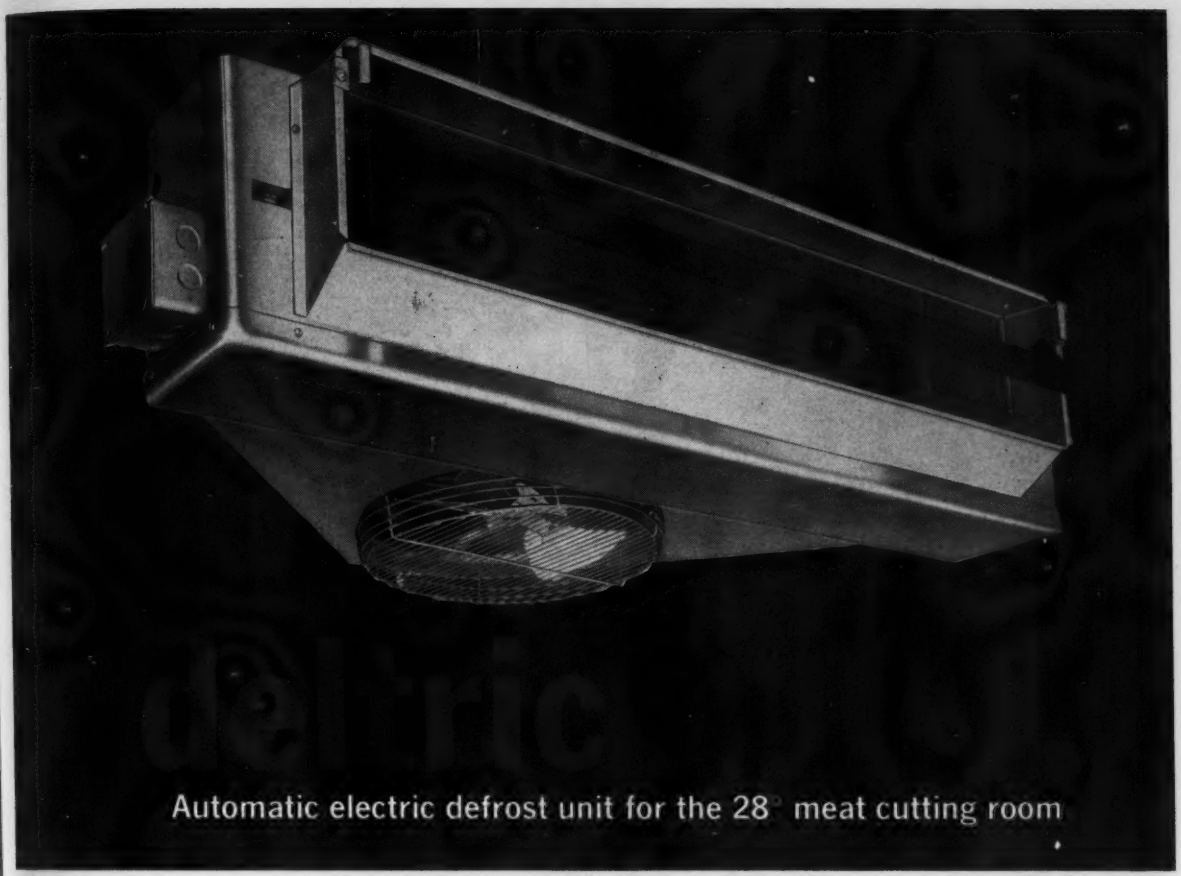
MARKETS
Fair trade practices,
Accurate weights,
Reliable market reports.

operated by members of
AMERICAN STOCK YARDS ASSOCIATION
1330 TERMINAL TOWER CLEVELAND, OHIO

EDWARD KOHN Co.
3845 EMERALD AVE., CHICAGO 9, ILL., Phone YArds 7-3134

CAR LOT OR LCL
SAUSAGE MATERIALS
TOP CHOICE OR GOOD
BEEF CUTS
OFFAL
AND
BONELESS VEAL
•
30 YEARS OF SERVICE

EDWARD KOHN CO.
For Tomorrow's Business



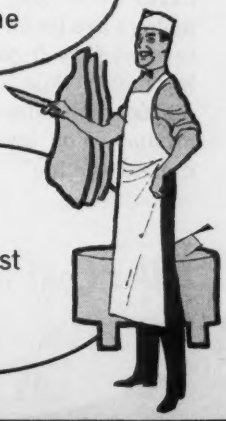
Automatic electric defrost unit for the 28° meat cutting room

Exclusive Thermovane holds heat at coils assuring fast, positive defrost



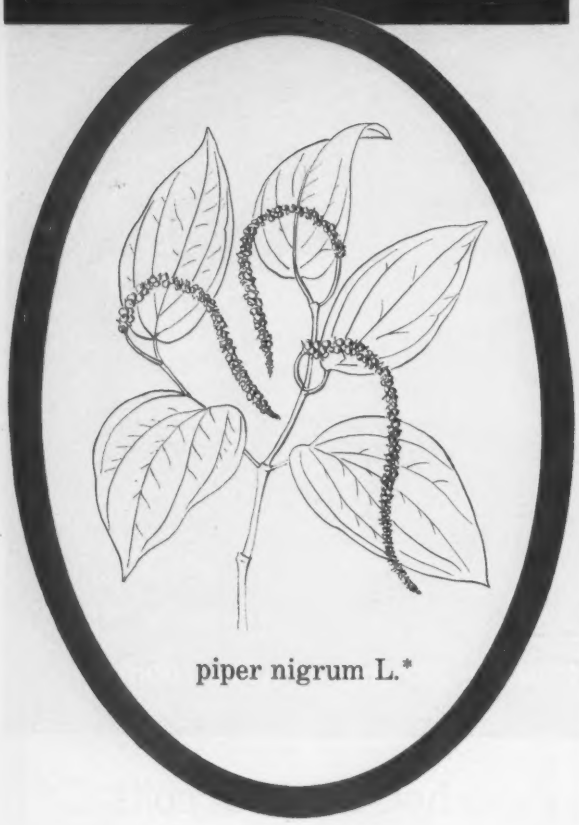
... *selected by Mr. Contractor* because of the economy and ease of installation and the simplicity of service.

... *selected by Mr. Butcher* because it keeps meat firm and easy to cut, keeps defrost heat from the meat and requires less box space.



RECOLD

Which Spice?



piper nigrum L.*

A picture of a seasoning in the making—a spice being brought to full flavor perfection. Each year sausage makers are using more natural spices because they impart true, rich, exciting flavor. This is flavor that literally *builds* high quality into a sausage product. You know it and your customers will too!

You Can't Improve on Nature

*BLACK PEPPER

American Spice Trade Association

82 WALL STREET, NEW YORK 5, N. Y.

More flavor!
More quality!
Morrell Meats!



John Morrell & Co., General Offices, Chicago, Ill.

DAVIES' Perfection

"Perfection"

BRAND

SMOKED MEATS

SAUSAGE

CANNED MEATS

DAVIES' Perfection

WILLIAM DAVIES CO., INC.

CHICAGO, ILL. • DANVILLE, ILL.

save $50,000.00 a year

on each Sliced Bacon line...
on labor and giveaway!

Cashin
WEIGHING-WHILE-CONVEYING

WEIGHING
-WHILE-
CONVEYING



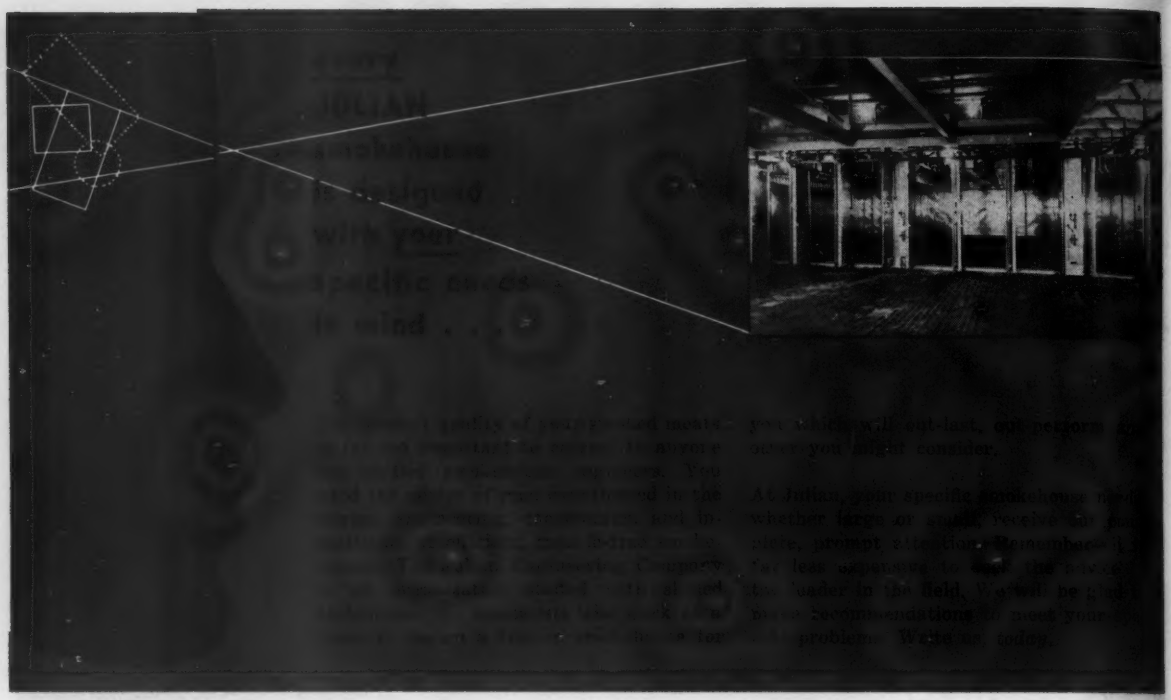
- NEW
- IMPROVED
- ELECTRONIC
- AUTOMATIC
- CUTS LABOR COSTS
- REDUCES GIVEAWAY
- CONTROLS PRODUCTION
- IMPROVES PACKAGE APPEAL

Yes, on each line operating 8 hours a day 5 days a week, the new, improved CASHIN Weighing-While-Conveying Sliced Bacon Machine SAVES up to $50,000 A YEAR or more! CASHIN uses any size bacon cardboard . . . handles any size bellies without change . . . handles bellies from 26° to 29° . . . handles ½ lb. and 2 lb. units as well as 1 lb. units. CASHIN makes all other methods obsolete!

Cashin
WEIGHING-WHILE-CONVEYING

BIG HIT
at the
AMI CONVENTION

CASHIN, INC., 16 STATE STREET, ROCHESTER, NEW YORK • F. M. TOBIN, PRESIDENT



Julian engineering company

5127 NORTH DAMEN AVENUE, CHICAGO 25, ILLINOIS

West Coast Representative: Meat Packers Equipment Co., 1226 49th Ave., Oakland 1. . . .
Canadian Representative: McLean Machinery Co., Ltd., Winnipeg, Canada

Superior Quality and Dependable Service for more than 50 Years

ASMUS BROTHERS, INC.

Spice Importers and Grinders

523 EAST CONGRESS • DETROIT 26, MICHIGAN



These two cuts of prime beef are from sister animals. Beef at the left is from an animal fed a conventional ration, showing well-marbled meat but also much waste cover fat. At right, beef from an animal fed on a MOREA Liquid Feed program has considerably better marbling and a minimum of waste cover fat.

MOREA® Liquid Feed produces quality meat with less fat!

There's something new in the beef and lamb business! It's MOREA, the modern liquid feed that pays off for the packer as well as the feeder, by producing meat that grades better with less waste fat.

What is MOREA Liquid Feed? It's a patented feed supplement which permits the feeding of larger amounts of roughages and smaller amounts of grain than usual. MOREA contains urea nitrogen, ethanol, phosphoric acid and trace minerals. Thousands of cattle and lambs have been fed to top finish on a MOREA program.

Here's how liquid MOREA Feed Supplement works: In the rumen of a beef animal or lamb, feed is digested by billions of micro-organisms and protozoa. MOREA provides these micro-organisms with the exact elements they need to build protein and carbohydrates, to digest high-cellulose roughage, and to carry on processes that give ruminants top nutrition for economical weight gains. MOREA is the modern supplement for ruminants—everything in MOREA is a needed nutrient.

But far more important to the packer, liquid MOREA Feed Supplement aims the whole digestive process toward producing top quality meat. More protein is formed, and white fat is deposited as marbling in the tissues, rather than in wasty cover fat. The result is that animals reach "market finish" faster. When the carcasses are cut, marbling is excellent and meat is firm, flavorful and tender. The dressing percentage per carcass is higher.

Cattle and lambs finished for market on MOREA feed programs, have consistently shown up well in the packing house. For more information on the advantages of MOREA-fed meat, write to the nearest address below.

MOREA is a registered trademark of Feed Service Corp.

MOREA® Liquid Feeds

U. S. INDUSTRIAL CHEMICALS CO., New York 16, N. Y.
DIVISION OF NATIONAL DISTILLERS AND CHEMICAL CORP.

FEED SERVICE CORPORATION, Crete, Nebraska



THE
PROVED TIME TESTED
EFFERVESCENT ISOASCORBATE
TABLET

TAKAMINE TAKATABS

(TRADEMARK)

THE EFFICIENT WAY TO USE
SODIUM ISOASCORBATE
IN MEAT PROCESSING!

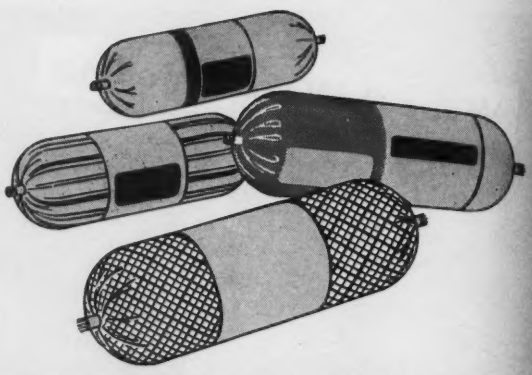
ACCURATE—premeasured, uniform addition of isoascorbate.
CONVENIENT—easy to handle, no paper to tear or dispose of, no handling of drums.
ECONOMICAL—eliminates waste, errors, spillage and use of excess amounts—as proved by actual in-plant studies.
FAST—dissolves quickly, eliminates mixing and need for stock solutions.
TIME SAVING—eliminates weighing and handling.
VERSATILE—can be used in comminuted products and curing pickle.
QUICK DELIVERY—from the Takamine warehouse nearest you.

It will TASTE better
LOOK better
SELL better
with TAKAMINE products

Write our Technical
Service Department
for Bulletin TL-400

TAKAMINE LABORATORY

DIVISION OF MILES LABORATORIES, INC.
CLIFTON, NEW JERSEY



YOUR PRODUCT SELLS FASTER IN "CHUB" PACKAGE

Kartridg-Pak's automatic machine makes complete Chub packages in sizes from 4 to 16 oz.

Now packages bulk pork sausage

Forms, fills, and closes over 1800 packages per hour
Continuous—Automatic

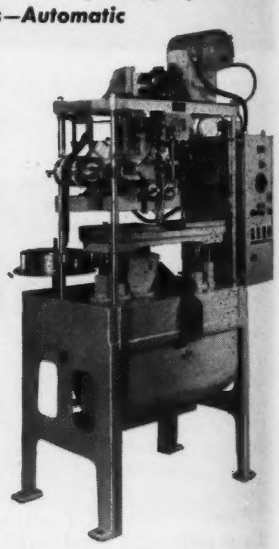
Makes a uniform, attractive package which means more impulse sales—more repeat sales for your product. And it's a convenient package for consumers to use. Gives added protection to your product.

Forms the package from flat roll stock thermoplastic film—saran, polyethylene, and others. Machine automatically closes package ends with wire clips made from roll stock wire.

Printed or plain film can be used. Package identification can be made by use of printed film, or by attaching attractive band labels.

Less total film and less labor are required with this automatic machine which means lower production costs. Flat film results in reduced film costs. Only one operator needed.

Machine accurately meters a semi-viscous product to control weight.



Floor space is saved. Machine is compact. Size 4 ft. wide x 3 ft. deep x 7 ft. high.

Low upkeep and maintenance are assured by the experience of present users.

For further details see
Kartridg-Pak Representative

Kartridg-Pak Machine Co.
1241 NORTH SEDGWICK, CHICAGO, ILLINOIS
Telephone MOhawk 4-2020

METROPOLITAN
top quality OILS and FATS

- OLEO OILS
- SOY BEAN OILS
- COCONUT OIL
- COTTONSEED OIL
- HYDROGENATED LARD
- DEODORIZED TALLOW
- HYDROGENATED TALLOW

For the best in vegetable oils, meat fats and shortenings at prices that save you money, look to METROPOLITAN! We can provide you with a wide selection of fats and oils for every requirement.

Only the most modern Girdler equipment is used to process our merchandise and meet high quality control standards.

For outstanding service on any need in fats or oils, contact Metropolitan today!

Directly to your door . . . anywhere . . . anytime!

Express delivery service directly to your door . . . daily or weekly . . . anywhere . . . anytime at your convenience via our own Red Falcon service fleet of 69 stainless steel tank trucks.

Available fully or partially Hydrogenated and/or Deodorized according to your needs.

RED FALCON



For Quotations:

Call or Wire—
Bayonne Phone: HEmlock 7-2400
New York Phone: WOrth 4-2850
Bayonne Teletype: BYO 661

METROPOLITAN FATS AND OILS INC.

Home of the Red Falcon Service Fleet

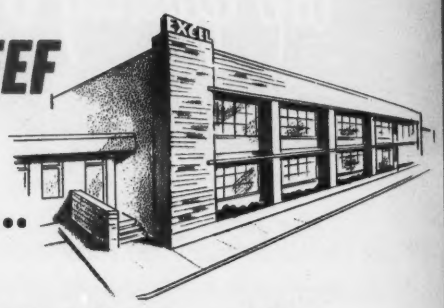
Foot of East 22nd Street, Bayonne, N. J.

THE WHOLESALERS PACKER ...

EXPERTS IN SELECTION

try SELECTED DRESSED BEEF

CARLOADS OR TRUCKLOADS



Excel PACKING COMPANY, INC.

900 EAST 21st STREET, WICHITA 2, KANSAS

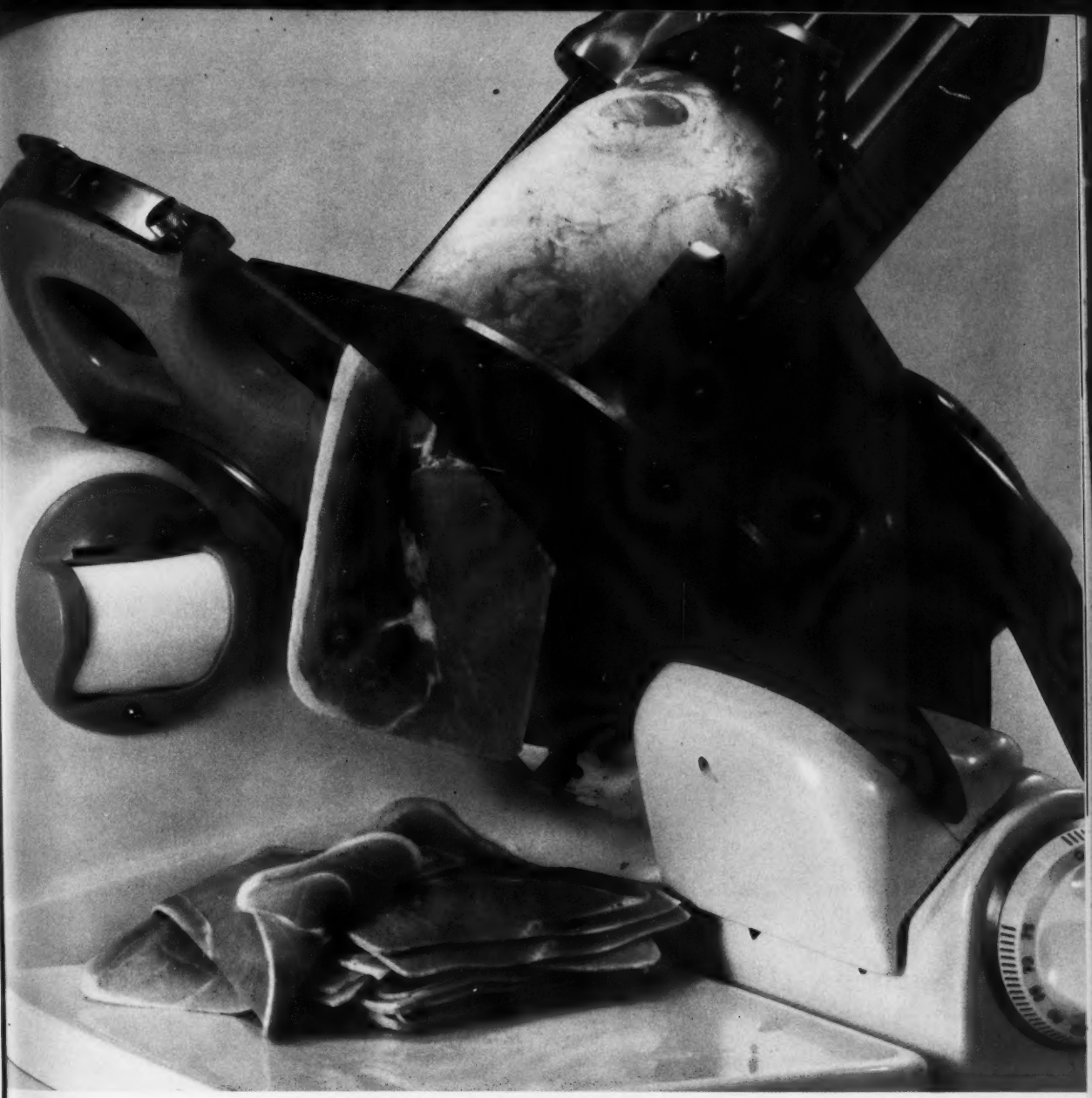
Contact the following brokers: E. G. James, Boston; Hess-Stephenson, Chicago and New York; Petersen-Prieeman, Inc., Philadelphia, and D. E. Flory, Oakland, for all west coast cities.

GOVERNMENT INSPECTED • GOVERNMENT GRADED IF DESIRED • ESTABLISHMENT No. 86

UNITED STATES COLD STORAGE CORPORATION

You have definite advantages in storing in a plant of the UNITED STATES COLD STORAGE CORPORATION. Operating eight large warehouses in seven cities, the corporation has in its organization specialists in warehousing methods, storage conditions, engineering, accounting, financing, marketing and traffic, usually not available in individual operations. The experience of our personnel, plus memberships in the NATIONAL ASSOCIATION of REFRIGERATED WAREHOUSES and THE REFRIGERATION RESEARCH FOUNDATION, provide a pool of knowledge which is available to you and can solve many a problem. Our integrity, financial rating and record of successful operation command the respect of your banker.

• CHICAGO 2055 West Pershing
• DALLAS 1114 Wood Street
• DETROIT 1448 Wabash
• FORT WORTH 1101 N. E. 23rd Street
• KANSAS CITY 500 East 3rd Street
• OMAHA 4302 South 30th Street
• PORT LAVACA, TEXAS P. O. Box 176



SLICEABILITY is an excellent measure of the quality of a ham. When the curing pickle contains Curafos, sliceability is improved . . . you get a firmer, juicier ham, more premium slices, less scrap and a brighter, more stable color.

CURAFOS

CALGON COMPANY

DIVISION OF **HAGAN** CHEMICALS & CONTROLS, INC.
HAGAN BUILDING, PITTSBURGH 30, PENNSYLVANIA
DIVISIONS: CALGON COMPANY, HALL LABORATORIES
IN CANADA: HAGAN CORPORATION (CANADA) LIMITED, TORONTO

Associate Members N.I.M.P.A. and A.M.I.

CURAFOS brand phosphates are fully licensed for use under U.S. Patent 2,513,094 and Canadian Patent 471,769. They are specially processed for ease of solution at full permitted strength. See M.I.B. Bulletins 190, 190-1, 199.



TEMPTING and TASTY!

Meats processed with **PRESCO** seasonings and cures make tempting and tasty dishes that keep customers coming back for more. It's the improved color, texture and flavor that does it.

Our advanced scientific and technological achievements in meat processing products and methods give packers the utmost in efficiency, yield and profits.



Among the many products for meat processing originated in our research laboratories are the famous

- **PRESCO SEASONINGS**
- **PRESCO FLASH CURE**
- **PRESCO PICKLING SALT**
- **BOARS HEAD SUPER SEASONINGS**

PRESERVALINE ...HOME OF **PRESCO** PRODUCTS

Since 1877

MANUFACTURING COMPANY

FLEMINGTON • NEW JERSEY

THE NATIONAL

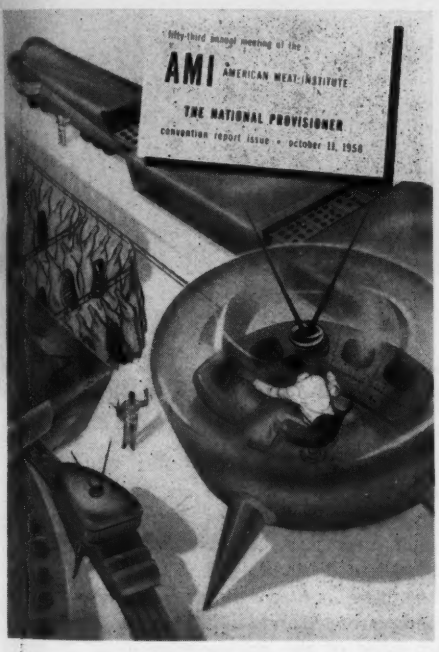
PROVISIONER

OCTOBER 11, 1958

VOL. 139 No. 15

It Can Happen Here

While no one may ever see a packinghouse quite like the one pictured on the NP cover, we are certain that, soon or late, plants will be built and equipped to function in a similar way. In keeping with the "changing patterns"



theme of the AMI convention, we merely mixed some of the techniques of science with devices the industry is developing.

Let's take that sausage producer in the left foreground. Is there anything impossible about a machine to emulsify meat cuts and to extrude the emulsion through tubes in which the material would be formed, heat-coagulated and pasteurized, exposed to smoke, chilled and finally expelled as finished sausage?

Knowing our ability to deal with spatial relationships in the air, on the ground and undersea, we don't believe that the problem of grasping and accurately dividing variable carcasses into standard cuts (left center) by electronic-mechanical means is an impossible one.

Centralized supervision and direction of many meat plant operations—by TV, radar and radio—are possible today.

It can happen here.

News and Views

Economic Study of the food industry may be a project of the Federal Trade Commission, according to a report from Washington. Three types of studies have been proposed — mergers, distribution methods and some selected product. If some particular feature of the distribution system were selected for investigation it might be the growth of supermarkets, or chain store buying, or food brokerage or the difficulties faced by independent store owners.

Business Sessions of the National Renderers Association at its silver anniversary convention, to be held in Washington, D. C., November 2 to 5, are expected to emphasize the growing importance to rendering of animal nutrition studies, broadening markets—including export—and continued research programs. Special theme of the convention will be "The Tale of Tallow," which will be built around the progress and growth of the rendering industry from ancient times to the present, and of the National Renderers Association from its founding 25 years ago, in 1933.

Price-Wage Controls of a "self-triggering" type were proposed this week by Senator Wallace F. Bennett of Utah. Emphasizing that he was not thinking of a return to wartime wage and price controls, the legislator suggested that the government say to labor and capital: "You cannot have increased wages and profits in any year following a year in which prices rose."

Meeting of Midwest Division of NIMPA accounting conference is being held on October 25 at the Hotel President in Kansas City in conjunction with the regional convention of NIMPA. The Eastern division accounting meeting, originally scheduled for October 10, has been cancelled.

Passage of Legislation equivalent to S-11, the "equality of opportunity" bill which would have restricted the use of the good faith defense against charges of price discrimination under the Robinson-Patman Act, will be pressed by Senator Hubert Humphrey during the 1959 session of Congress, the Minnesota Senator said last week.

Corn and Other Grain owned by the United States is straining the government's storage space, and with some of the large 1958 crop still to come the USDA has offered to pay farmers to store their 1958, and some of their 1957 and 1956 grain for another year instead of turning it over to the government.

Exports of Edible animal products and animals rose 2 per cent in August over July to total $24,100,000. Exports of inedible animal products and animals advanced 11 per cent over the period to total $20,600,000.



AMI Packer Throngs Alerted to I

A NEW kind of program in which limited talks were combined with audio-visual sessions and panel discussions, and all interspersed with "free" periods for exhibit-going and other activities, was employed by the American Meat Institute at its fifty-third annual convention, held at the Palmer House, Chicago, from September 26 to 30.

In developing the convention's theme of "changing patterns," the speakers, panelists and movies told the meat packers some encouraging facts about the future—more people to feed, more livestock to process and more efficient and economical ways to do the job—but also warned them that they are lagging behind other segments of the food field and American industry in operating, selling and other fields.

The Institute has already trimmed its expenses in line with the lower level of income expected in the next fiscal year, but George Stark, who continues as chairman of the board for 1958-59, and Homer R. Davison, president, expect to make the association an even more alert and useful agency for industry service in the months ahead.

President Davison's leadoff talk (page 78) surveyed three decades of change in which the terminal markets have dwindled in importance as centers of livestock procurement and processing, farming and livestock production have been concentrated in fewer and larger units and food retailing has become a mass-buying and mass-selling operation. Government, too, has intervened directly and indirectly in the meat business—and some of the intervention, such as that represented by grading and tax policy, is an obstacle to the meat industry's effort to earn, attract capital and fit into the changing patterns of the U. S. economy.

Packers' footwork will have to be fast to capitalize on the opportunities afforded by a rapidly growing and shifting population, bulging in certain age and the higher income brackets, and the employment of more women, AMI members were told by Dr. Herrell DeGraff of Cornell University (see page 81). "We have an enormous market ahead, but it is a market in which you are going to have to fit, not only to build a bigger place, but even to hold your place," economist DeGraff said.

After telling the group to expect more meat animals, fewer dairy cows and bulls, continuation in regional shifts in livestock production, more artificial breeding, less seasonality in marketings and an increase



to Industry's Changing Patterns AMI

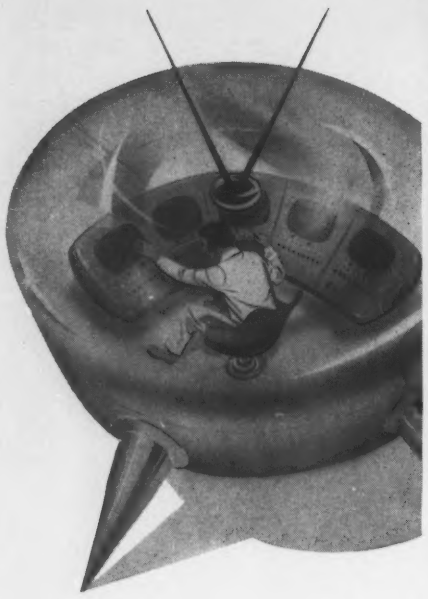
in contract farming, Dr. Robert Kramer of Michigan State University (page 85) urged the industry to cultivate more flexibility in operations and merchandising, and to have "the guts to discount poor quality and to give a reward for the kind of quality that the consumer really wants."

Without urging automation on the meat industry, G. L. Scott of the Midwest Research Institute (see page 95) told conventioneers how to approach this new "pattern" and discussed some of its advantages and shortcomings. C. E. McMichael of The Girdler Corporation described how almost completely automated processes for refining, deodorizing, hardening, stabilizing and plasticizing lard can now be combined (page 99) in a single plant, which might be used by several packers to upgrade and standardize the lard from all their establishments. Hide takeup has already been successfully mechanized by Canada Packers Ltd. (see page 103), and was shown in a movie.

New machinery enables the processor to fine-cut meat and offal material very rapidly, but the basis of good sausage is still a good emulsion containing the proper protein and fat, according to F. W. Tauber of Visking Company (see page 108). Automated and high-speed processing make quality control a vital necessity for efficient and profitable operation, it was pointed out (page 113) by Julius Zillgitt of Geo. a Hormel & Co.

Packers were told that one key to better and more profitable distribution of their products lies in learning what the consumer thinks, buys and eats, how and when food is prepared and other facts about the actual diet of the American people. This suggestion by researcher S. G. Barton (page 121), was followed by an exposition of the changing patterns in food retailing and how they affect meat (see page 126). Sales expert John Kielty described packer salesmanship as pretty sad in comparison with the work done by other food organizations, and urged packers to get better salesmen, back them up with firm price policies, training, "excitement" in the form of new packages and products and to exercise more supervision over sales work (see page 133).

The annual dinner (see page 136); a giant exhibition of packinghouse equipment and supplies (see page 163); the award of 50-year gold badges to veterans of the industry (page 169), and first recognition of packers as community relations leaders (page 134) were other features of the fifty-third meeting of the AMI.



CHANGING PATTERNS

Their Effect on Livestock Production and Procurement

AMI President Homer R. Davison Leads Off

THE FIFTY-THIRD annual meeting of the American Meat Institute is declared in session on the morning of September 26, 1958.

The format of this meeting, and the entire organization of the convention program, is designed to emphasize the changing patterns that affect the meat and livestock industry, a discussion of these changes in detail by experts in their respective fields, coupled with what we hope will be useful suggestions and ideas as to how best the industry may adjust.

It is intended at this annual meeting to consider as thoroughly as possible these changing patterns in terms of their effect on livestock production and procurement, on plant operations, on sausage and other processing operations, and on sales and distribution. We have sought out the experts in all the fields to be covered—experts from within and from outside the industry. The program is arranged in what we hope is logical continuity, with discussions pertaining to raw materials production and procurement at this session, new developments in mechanization and automation this afternoon, and tomorrow morning a searching discussion of the sausage division of the industry. On next Monday the convention session will concentrate on sales and distribution, which will include an appraisal of the changing consumer, the changing retailer, and how selling needs to be adjusted to meet the impact and environment of our rapidly adjusting market.

Over the years there have been special meetings for special groups in the industry, but until this year we haven't undertaken a separate management program designed especially for the top management group. This session will be held on Tuesday morning, and it is entitled "What Management Should Be Thinking About." Executives of regular members and sausage members are urged to attend this management session.



DR. H. DeGRAFF



DR. R. KRAMER



H. R. DAVISON

Thus the convention is arranged chronologically to discuss and appraise the most important overall problems with which meat packing is faced. It is intended to raise questions and we hope to stimulate your thinking. It is hoped also that the next few days will bring forth provocative ideas which, whether you find yourself in agreement with them or not, you will find useful in sorting out the policies, programs and actions which in your individual company come first, and which come second, and which come last, and which maybe will suggest that some things thought to be so necessary in the past are no longer important at all.

THREE DECADES OF CHANGE: I would like, for a few moments, to preface the session this morning with a bit of history. During the past third of a century the packing industry, like most other areas of our economy, has been in a constant state of change, both within and without. Many of these changes have occurred so gradually as not to be easily recognized as they occurred.

Prior to the 1920's, the meat packing industry was an institution built on a foundation consisting of three major conditions. First, the railroads of the country

hauled the bulk of the livestock to central points, where it was purchased and processed and from which meat food products were distributed. The great bulk of processing was clustered about these great central concentration areas in key cities where livestock was available for ready delivery to a plant.

Second, with the exception of a few large institutions producing range cattle in the West, most livestock was grown and prepared for market by millions of farmers operating small units. Power on farms was provided by horses, and our economy at that time was still essentially an agricultural economy.

Third, retailers were numerous and for the most part individually owned and manned. The multi-store retailer was beginning to expand. To a considerable extent, the meat market was a separate institution from the grocery store, with the butcher and his customers in personal contact with each other.

AREAS OF CHANGE: Since 1920 drastic changes have occurred affecting all three of the basic platforms on which our industry was organized. No longer is the bulk of livestock hauled by the railroads to central terminals. In 1920 we had only 400,000 miles of hard surface roads. Today the country has a network of 2,000,000 miles of improved rural and through arteries, all hard surfaced which can be used by livestock truckers.

In 1920 we had only a little over 3,000,000 trucks—today, over 10,000,000. In 1920, 2 per cent of our cattle were hauled by trucks—today, 86 per cent by truck. In 1920, 10 per cent of our calves were hauled by truck—today, 84 per cent by truck. In 1920, 3 per cent of our lambs were hauled by truck—today, 63 per cent by truck. In 1920, 7 per cent of our hogs were hauled by truck—today, 89 are so transported.

In 1920 we had nearly 7,000,000 farms—today under 5,000,000. On 10 per cent less harvested acres today we have increased crop production per acre from an index in 1920 of 86 to 112. In 1920 one farm worker supported something over eight people, and today one farm worker supports 24 people. Clearly, mechanization and improved methods have changed agriculture rapidly during this last third of a century.

While our methods of transportation and our farm production patterns have undergone a vast adjustment, merchandising of our products has undergone an even greater change. In 1920, over 500,000 stores, most of which were individually owned, did the great bulk of retailing. Today, in spite of population increases, 385,000 stores do the job, and 42 per cent of the retailing is done by corporate chains, 42 per cent by voluntary chains and only 16 per cent by individually-owned and strictly local retailing enterprises. Today the consumer's contact with our industry is largely confined to the self-service display case where he makes his purchase, many times on impulse and in competition with thousands of other grocery store food items.

MEAT RATINGS SHIFT: During this third-century, nothing seems to have failed to change. We have even a different distribution of production and consumption of protein foods by classes of livestock, with what seems to be a new pattern emerging. This will doubtless change again, but now our beef production is 44 per cent of the total, compared with 38 per cent in 1920.



POST-ELECTION SMILES and handshakes are shared by (left to right) Homer Davison, president of the American Meat Institute; Chris Finkbeiner of the Little Rock Packing Co., Little Rock, Ark., a new director of the AMI and honorary chairman of the board of NIMPA; Olin Nebergall of D. E. Nebergall Meat Co., Albany, Ore., another new director of the Institute, and George Stark of Stark, Wetzel & Co., Indianapolis, who had just been re-elected chairman of the board of the AMI for 1958-59.

Veal production still is about 5 per cent of the total, but lamb has dropped from 3 per cent to 2 per cent. Pork production has dropped from 45 per cent to 32 per cent, but poultry has expanded from 9 per cent to 17 per cent.

Not only have the percentages changed into a new pattern but the totals have changed, with double the tonnage of meat and poultry produced and sold last year over the 1920 figure.

Facing this increased production, the number of packinghouses has also doubled from approximately 1,300 in 1920 to over 2,300 in 1954. Non-slaughtering processors have increased at about the same rate, from 633 to 1316. With it all has come a dramatic population change from 106,000,000 in 1920 to 174,000,000 today, and as indicated, another movement in our farm population which has switched from 20 per cent in 1920 to only 12 per cent in 1958.

So far we have been briefly outlining as background for this discussion this morning only a few of the physical changes, but there have been other basic elements which have gradually and almost unobtrusively affected raw material production patterns in the meat business. The government has entered the arena, sometimes directly and sometimes indirectly, so that aside from the question of whether this is good or bad, it is now possible to trace some of the effects.

MORE GOVERNMENT: Beginning in the 1920's, and running through the depression of the 30's, the war period of the 40's, and up to the present, the federal government has changed from the referee in our business to one of the players. The indirect effect of farm programs on production patterns has been considerable. For example, the program for cotton, designed to be helpful to the cotton farmer, has, by a system of controls of various kinds, gradually placed the Southeastern section of our country in a difficult position with respect to its ability to compete in the production of cotton with other domestic and foreign producers.

High prices have encouraged cotton production at lower costs in Brazil, Mexico and Egypt, with the obvious subsequent effect on the world market. It has also stimulated the production of cotton in California,

Arizona and Texas where more efficient production of cotton under irrigation has been achieved than is possible in the Southeast. Thus the agricultural economy in the Southeast is gradually shifting from one based on cotton to one based on livestock.

Controls of various kinds have stimulated the production of sorghums and other feeds in the Southwest, which are in competition with Corn Belt corn. The result has been a stimulant to feeding operations on an increasing scale of commercial character in the West and in California. Here, again, the basic livestock production pattern seems to be changing.

Government storage programs, which hold grains out of use, have tended to retard livestock expansion to the extent that it might have grown had it not been for such federal action.

Government action in the field of standardization, such as beef grading, which, while not compulsory, does as a matter of fact tend to inject into the cattle and beef industry artificial values between grades, which are greater than differences in quality justify.

GRADING: Our present grading system for beef presents a very difficult problem. It is based primarily on the old English system of quality judged by the degree of fatness. While other elements are considered, the degree of fatness is the arbitrator of quality. We pay a high price for quality, for in the act of fattening deposition of surplus fat in the tissue is inevitable. All beef, regardless of grade of fatness, is top quality for some purpose and should not be down-graded because it fails to fulfill the requirements of the broiler. As we face the future, this problem must be realistically explored and a practical solution achieved.

During the recent third of a century the government has also been a part of our business in the form of a government monopoly called price control. For seven years during the past third of a century we operated under price control. This caused innumerable dislocations, including the development of new competition in the industry and the stimulus given to the freezer-locker business, new facilities developed out of war demand which, I think, contributed to the industry's problem of obsolescence. Many a packinghouse was refurbished and patched up to take care of war-time requirements, which had it not been for the war and the controls which accompanied it, might have been set aside much sooner.

Another inflexibility resulting from government requirements which needs attention in our changing tempo, tends to keep our physical facilities frozen and reduces flexibility. We call it our problem of bricks and mortar. Depreciation rates allowed by the Internal Revenue Service approximate 2 per cent. Thus, it takes 50 years to depreciate a facility. The federal Meat Inspection Division, as a result of tradition and practice, requires certain types and kinds of buildings, facilities and arrangements, which aggravates the problem; thus adjustment and new thinking on the handling of our raw materials are made more difficult. We need to seek government cooperation to loosen up in our ability to adjust in this area.

Changes in the labor picture have also been a factor in the overall problem of livestock production and procurement. During and since the war the labor market has been tight. Competition for labor has definitely been a factor in the reduction of sheep and lamb production. It has been difficult for agriculture to supply its needs, which, in turn, has stimulated mechanization and has probably retarded livestock production in that animals must have individual care and constant supervision. This labor shortage, coupled with general unionization of the packinghouse labor force, has reduced our flexibility.

COST A DICTATOR: Rigidity in the area of costs all too frequently causes the packer to purchase his livestock raw material for processing as a contribution to meeting overhead rather than to tailor his volume to what he can sell profitably. Thus, our responsibility to the producer to reflect the true demand is sometimes distorted and he may interpret eagerness to buy as a demand for more production. Here the packer has dissipated capital, irretrievably lost to no purpose, except for the hope of a later recovery.

All of this indicates that many of the traditional patterns with which we have operated may be valid no longer. Livestock production patterns seem to be narrowing. Perhaps the day is not too far away when seasonal periods of heavy production, matched by low production periods within the same year, will level off. If so, our need for excessive facilities for the peak periods could also be leveled off.

Improved and speedy curing methods have greatly shortened the time required for processing. The speculative opportunities in our business are becoming less and less a factor to the point of practical disappearance, and merchandising and day-to-day profitable sales have become a necessity.

Changes in consumer preferences present us with a major problem in the production and sale of fats. It is traditional in the livestock business that fat animals are the key to quality. Our livestock shows are called "Fat Stock Shows." Our entire beef quality program is based largely on a degree of fatness as a determinant of quality. The fat hog has been the outlet for the vast grain producing areas of the country. Today, however, fatness, while still an important element in the achievement of quality, is faced with resistance on the part of those who buy and eat our product.

As we seek sound answers for the conduct of our business, another basic problem is developing which requires our best thinking. That is, the trend in the direction of standardization. If mass selling means mass standardization wherein the commodity produced by each individual competitor is, as nearly as possible, like that produced by each other individual competitor, the problem for the meat packer as an individual promoter of his own products is greatly increased. It shifts the burden from one of selecting product for the trade to one of selecting price for the trade, and shifts a heavy burden on economy of production.

In the last analysis the consumer pays all the bills. He has to be satisfied. Our problem is, how do we give the greatest service and extract for that service its proper compensation? How do we earn and attract capital to keep our facilities up-to-date as we fit into the trends and into changing patterns?

In Quantity and Quality of Meat Consumers

As seen by Dr. Herrell DeGraff, Babcock Professor of Economics, of Cornell University.

I WAS asked to take a look at some aspects of the changing consumer market as it is of significance to this industry. It seems to me that this consumer market is composed of several pieces. First, there is the question of the population and how it is growing and shifting and changing in composition. We are going to take a look at that particular situation.

What is happening to income levels of this population and to the distribution of incomes? What about the competitive situation that this means for this industry?

I have a series of nine charts that I am going to ask you to look at. I would like to pay my respects for my intellectual debt for these charts to Mr. Johnson of the J. Walter Thompson Co., who has put together a similar set from which I have borrowed rather ruthlessly.

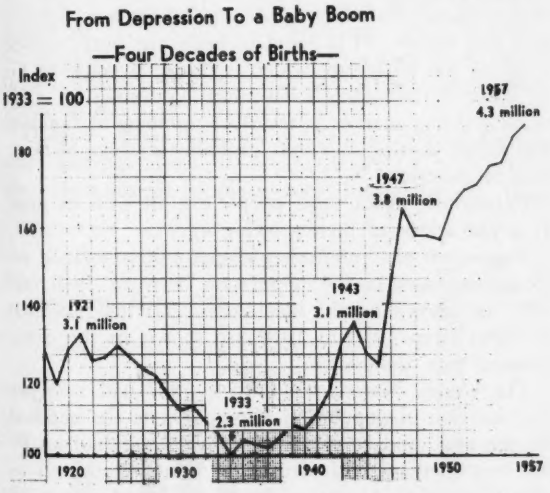


FIGURE 1: A rising tide of babies.

In **Figure 1** we have a line which shows four decades of births in this country and furnishes an explanation for much of the amazing growth in our population during recent years.

Look back about 25 years to the early 1930's, when we had a very small total number of births per year relative to our previous experience. Births per year had fallen to 2,300,000, after which we began an increase.

Here is what happened during the first year after Pearl Harbor. Births climbed to something over 3,000,000. At the end of World War II, after an enormous number of new families had been created, births got up to 3,800,000. The number of births last year (probably to be repeated this year) was somewhere in the neighborhood of 4,300,000.

There are certain points that need to be made about this. What we have been experiencing is an increase in the number of children per family, not merely a larger number of families producing some more children.

If we go back to 1940 and compare it with 1955, what happened to the number of first births in families? That rate increased from 30 first births as a standard rate in 1940 to 33 in 1955, or an increase of about 10 per cent. However, there was a 60 per cent increase in the number of second births, and more than 100 per cent increase in the number of third, fourth and fifth births during this period.

We have as many four-child families today as three-child families in the early 1940's, and more three-child families than we had two-child families in the early 1940's. It is the continued willingness of many, many families in this country to have more children that explains the continued high birth rate.

Figure 2 shows the shift in the age distribution of the American population in 1957 as compared to 1940.

Here is the reflection of the high birth rate that I have just been talking about. Let's take the 10- to 19-year group in 1957, consisting of people born between 1938 and 1947. Note that only a small increase is shown. However, these children born between 1948 and 1952 were up 68 per cent. These born between 1952 and 1957 were up 69 per cent. All of those youngsters are going to be growing into the older age groups very shortly. What will that mean? We will take another look in just a minute.

The other thing I would like to have you note is an increase in the number of senior citizens among us, those 64 years old and over in 1957. There were 56 per cent more than in 1940. This is a reflection of the big advances in medicine in recent years, and is particularly due to the control of infectious diseases. It calls attention to the fact that the big things left to be considered

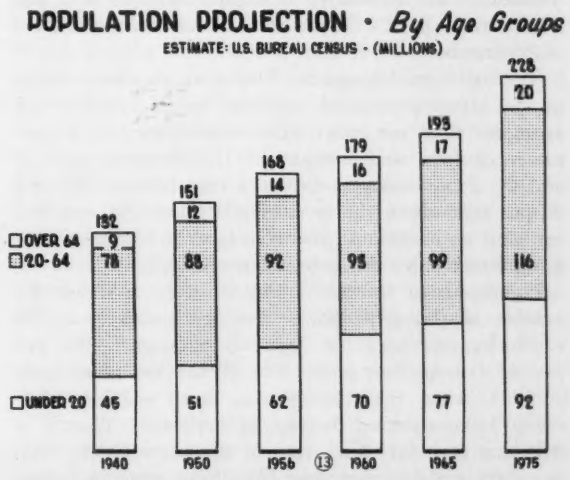


FIGURE 2: How age groups are changing.

in this field are, perhaps, cancer and heart disease.

This great progress is being made in every direction; and my medical research friends tell me that we can expect that the older citizens among us are going to increase very sharply in the years ahead.

Here in the middle you will note we have the smallest increases. This is the productive age group. More children and more of the older folks must largely be carried by this productive age group in the middle, and it explains why the labor force has been very tight in recent years. It also explains why so many women have gone to work as part of the national labor force.

Figure 3 is a picture of what is going to happen to the number of teenagers among us. In 1958, we have 25,200,000 teenagers against 22,000,000 only five years ago, but see what is ahead of us. By 1960 we go up to 28,000,000; by 1965, up to 34,000,000, and by 1970, up to 38,000,000.

Let me call your attention to the fact that this is not a matter of birth rates to come. These people are all

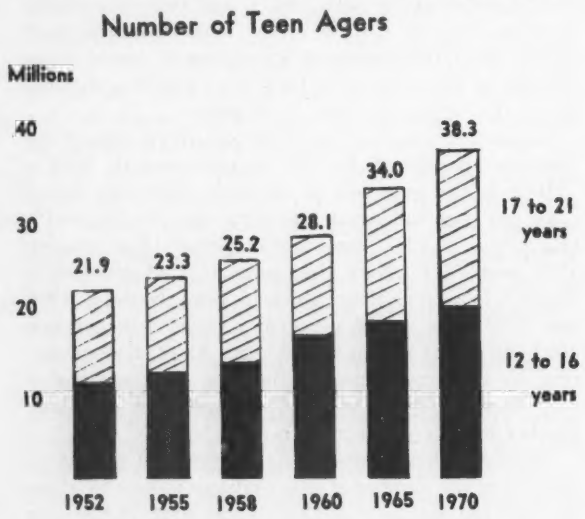


FIGURE 3: Rock-'n-Roll set is growing.

with us. It is just a matter of their growing up, and between now and 1965, we will have a 35 per cent increase in the number of teenagers. Between now and 1970 we will have a 52 per cent increase in the number of teenagers.

Teenagers are big eaters. This is an enormous factor in the growing demand for food in this country. A youngster does not reach adult equivalency as a consumer of food until about age 12. Between ages 15 and 21 these teenagers eat at a rate between 20 and 25 per cent above the level of all adults. So, you can see what an enormous growth in food and meat market is represented by this growth in teenagers.

Figure 4 is of extreme interest to me. It shows the number of young people in the age group 18 to 24 which we call here the "age of marriage." We are now at a rather low point. We hit the low point back in 1955, when the number was down to 15,100,000 young folks reaching the age of marriage. That is a reflection of a low birth rate of the early 1930's. We are slightly above that now. We have gone to where we now have 15,500,000 in this bracket of 18 to 24.

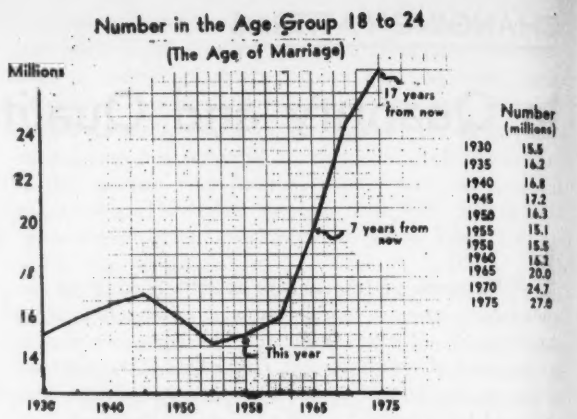


FIGURE 4: More people of marrying age.

See where it is going seven years from now in 1965. Then we will have 20,000,000 in this age bracket, and in 1975 we will have 27,000,000 17 years from now in this age bracket.

This is the group of young people who in the years shortly ahead are going to be establishing new families and new homes. It is going to bring the next upward surge in the birth rate which is probably going to hit us about in the middle 1960s, and it promises an enormous growing market in terms of numbers of families, and rather shortly after that, probably in terms of numbers of children.

Remember, again these people are all with us now. It is just a case of their growing up.

Figure 5 is also interesting to many of you. In it regional increases in the population between 1940 and 1957 are shown by the black bars, and the projected increases from 1958 to 1970 are shown in the cross-hatched bars alongside.

The United States from 1940 to 1957 had a 29 per cent increase in population. Compared to the national 29 per cent, and three Pacific coast states had an 89 per cent increase. Of course this conceals as well as reveals the facts, because the figure for the state of California has more than doubled.

Texas, New Mexico and Arizona had a 49 per cent

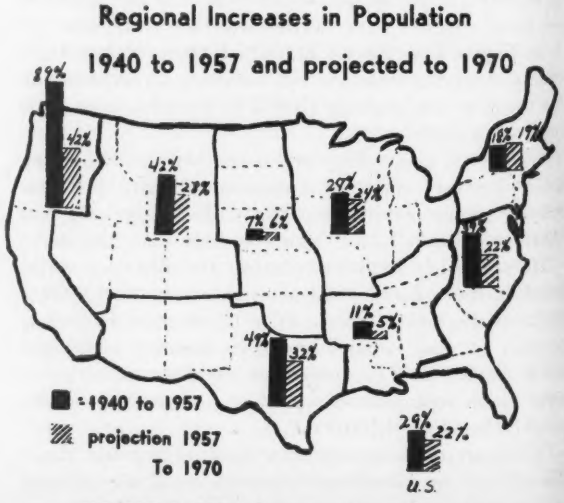


FIGURE 5: West is outgaining other areas.

gain, but that hides the fact that the population of Arizona has more than doubled—up 55 per cent compared to 1940. The mountain states had a 42 per cent increase, but Colorado, Utah and Nevada have shown still greater increases. The increase in the Southeast was 39 per cent, but the states of Maryland and Virginia show the slopover of growth of population in the Washington, D. C. area, that increase being over 50 per cent. The population of Florida, the Sunshine State, has more than doubled.

Looking ahead from where we are to 1970, the projection, of course, is pretty much for the same sort of population increase.

I would like to make just one more point about this chart, and that is that these are percentages. Percentages don't make markets; people make markets. Even these areas that show relatively small percentage increases are still areas in which there are more people now than there were in 1940, and there will be still more in 1970, even in cases where the percentage gains are rather small.

The Northeast has had an 18 per cent increase in the last 17 years, but whereas there were 36,500,000 people in the Northeast 17 years ago, there now are 42,000,000 in the Northeast. The market is bigger than it was, even though the percentage figure hasn't grown as much as the others.

Chart 6 shows the mobility of the population for one year, between April, 1956 and April, 1957. It shows the percentage of people moving during the year from

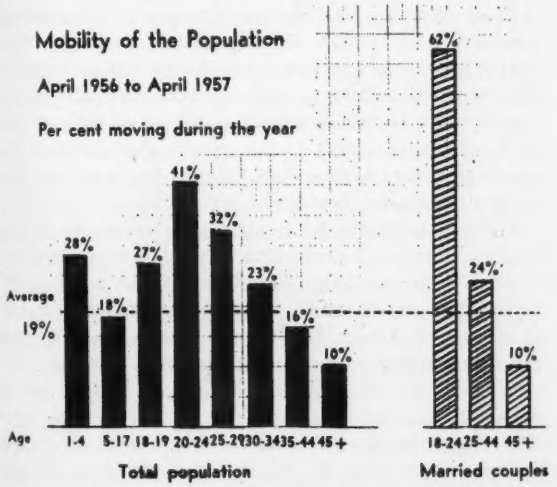


CHART 6: Young Americans have gypsy blood.

one residence to another. The overall average was 19 per cent, meaning that roughly one-fifth of the people of the United States moved their residence in one year.

The total of the population moves once in five years. When moving is broken down by age groups, note that of the young marrieds, age 18 to 24, 62 per cent move in one year; that is, almost two-thirds of them change their residence. Even among the folks 25 to 44 years old, one in four moves each year. It is only the old people who settle down and stay put in this country.

This means that we have a population in this country that is unencumbered by tradition or by deep roots. The people are moving to new neighborhoods, shopping in new stores, and are willing to accept new experiences and to try new things. Anyone who is producing to sell to these people had better recognize that they are moving into unfamiliar environments very frequently, and, presumably, are looking there for familiar products. It should mean quite a great deal to the people who are producing a branded product and trying to keep it before the American public.

This chart tells quite a story of the job you must do in catching up with this highly mobile population and

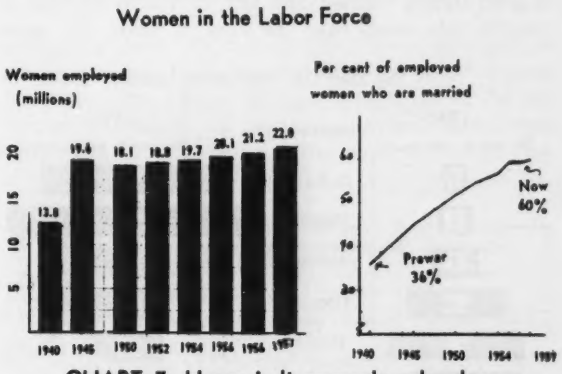


CHART 7: Home isn't women's only place.

keeping your product story before them, and keeping that product where they will be able to find it in the new environments into which they are constantly moving.

Let's look at the shift to the suburbs that is going on among us. We took the figures for 168 cities in the United States to see what had happened to their populations between 1950 and 1957. They had an overall increase of 6 per cent in these seven years. The U. S. had a total gain of 12 per cent.

What happened in the suburbs of the same cities? Population was up 35 per cent. The suburbs are not only growing six times as fast as the cities that they have developed around, but the suburbs are growing six times as fast as all the rest of the United States.

This points up very clearly that suburbia is the growth point of America. Suburbia consists of the young families—the homeowners instead of apartment dwellers. It is made up of the more venturesome among the young people. Suburbia is family-living conscious. Here lies a concentration of children. This is the station wagon and the barbecue set. This is the meat-eating set.

Twenty-seven per cent of the population of the United States lives in suburbia, but these people spend 32 per cent of the total money that goes for food. Because of the concentration of people and of youngsters in suburbia, this is where tomorrow's food habits are made.

Chart 7 shows the women in the labor force in this country. Before World War II, in 1940, we had just short of 14,000,000 employed women in the United States. Between 1940 and 1945 the number of employed women jumped to 20,000,000 and never since has it decreased significantly. At the present time we have 22,000,000 employed women, making one-third of the total labor force.

The chart on the right shows the percentage of the employed women who are married. Before the war it was 36 per cent. Now, 60 per cent of all the employed women are married, meaning that they are not only

gainful workers but they are homemakers. They have to maintain a home and hold down an outside job.

They can't do this without some maid service to help them run their home. While they can't hire domestic servants, it doesn't mean that they are doing without that maid service. They are getting an enormous amount of it from you who produce their food. This need is the greatest factor behind the convenience foods.

The wife who is holding down a job outside and must come home and get dinner in 20 minutes wants it to be a good dinner without any lack in quality or taste or variety. She must have the kind of foods that make

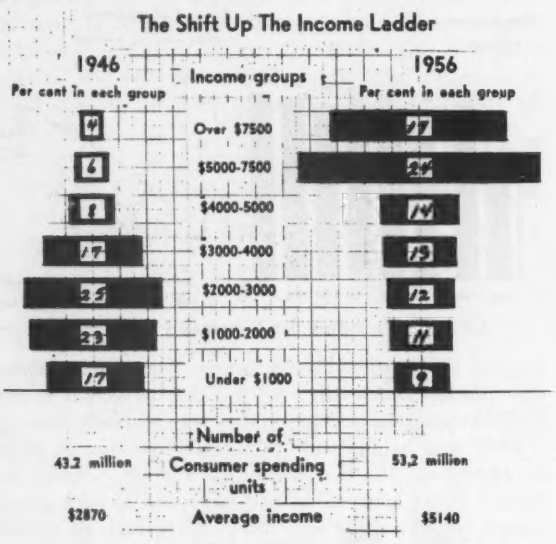


FIGURE 9: More families with more income.

it possible for her to get that dinner ready quickly. The question she faces is whether or not the cost of the convenience food offsets the time and energy she otherwise would have to expend in preparing the food. By the millions she has decided that the cost of the convenience foods is a very good bargain for her.

For many years to come we are going to find a high proportion of women in the labor force, and that a high proportion of those women are going to be married.

Figure 9 shows the shift up the income ladder. The percentage of the families in each income group in 1946 and 1956 is shown here. Look at the change that has taken place in these bars from 1946 to 1956. Seventeen million more families have incomes over $5,000 than was the case ten years ago. By contrast, 11,000,000 fewer families have incomes of $3,000 or less.

The big story behind these figures is the amount of discretionary purchasing power that the American people possess. By that term I mean the proportion of income that is left after the basic living costs of food, clothing and shelter have been paid. It may go for a more flashy automobile or home, more television sets more bathtubs, more vacations, more and better food or any of the things for which they might wish to spend that income above their basic living requirements.

Ten years ago the American people had overall disposable family incomes after taxes of about $206,000,000,000, of which $90,000,000,000 could be classified as discretionary spending money.

In 1957 total disposable income had increased to $303,000,000,000, and the discretionary residue had increased to over $150,000,000,000.

This kind of a situation is a salesman's dream. It is the kind of market in which he can go to work and, on the basis of good salesmanship, he can sell his product.

Here is an opportunity for us, among other things, to upgrade the diet of the American people still more.

I have been pointing out that an enormous growth in the market lies ahead of us and this is indicated by the increase in population, by the composition of that population and by the income level of the population.

I have heard people in the food business say many times that the consumer dominates the food business, and that any producer must appeal to the consumer's interest and sense of values.

However, this doesn't mean that the consumer dominates the food business. The consumer influences it merely by her veto power over any product. She can take it or she can leave it. However, at best this is a passive influence and it is almost a negative influence. The decision to take it or leave it falls far short of being a sufficiently aggressive influence to explain the dynamic nature of America's food industry and the innovations, changes and continued striving for better products and bigger scales which do characterise our food industry.

I want to emphasize my own belief that our markets are not consumer-dominated—they are merely consumer-oriented; the product is directed to her interests, but she does not dominate what you do.

It seems to me that the proper view is that the food market in this country is competitively dominated and that the individual producer is looking for that combination of characteristics of product and services that will win over the consumer from her passive attitude to one in which she is willing to take the product. When the producer gets such a product, then he has a winner and he gets the market before the competition.

Will the producer learn from a consumer what it is that she wants? I think that he seldom has a chance to learn from her. Her wants are created by competition. Whoever wanted any nylon hose, an electric shaver or a canned ham? It is constructive dreaming that creates consumer wants and competition for it.

I would like to suggest to you that competition is everything that consumer passiveness is not. Competition is aggressive and not passive; competition is forward looking; competition is creative, it innovates; it tries the new, and it wins when a combination is right. Competition is the motive for making products different, for finding new ways to appeal to consumer interest and consumer sense of values. It is the force that makes tomorrow different from today.

I think that it is competition alone that dominates the food business. It is the force that makes the food business so dynamic.

Anyone who believes that the consumer dominates the food business had better come out from under his anesthesia before the competition kills him off.

We have an enormous market ahead of us, but it is a market in which you are going to have to fit, not only to build a bigger place but even to hold your place in that market.

CHANGING PATTERNS

In Livestock Numbers, Methods and Marketing

As seen by Dr. Robert Kramer, professor of agricultural economics at Michigan State University.

I WISH to discuss with you some of the changes in the patterns of production and marketing, to consider numbers of the different species of livestock, utilization of feeds, artificial insemination, year-round production, individual operations, channels of marketing and seasonality of marketing.

I hope to make the following points:

1. We have large feed supplies in this country. Yes, we have a growing population, increasing at a rapid rate, but I believe that we will have an increasing number of each species of meat animals, and that we will continue to have a large supply of meat to feed each and every person in this country.

2. We will have fewer dairy cows and bulls.

3. There are trends which indicate that we will continue to have larger supplies of the higher grades of beef.

4. We do have some regional shifts in livestock production. The West, North Central, South Central, South Atlantic and Western regions have gone increasingly into the cattle business.

Hog numbers have been increasing in the Southeast, particularly in North Carolina. However, we have to be careful with percentage figures. Some of these regions have shown large increases percentagewise, but when you take a look at the numbers, they still contribute only a minor part of total production. For example, I mentioned that hog production is increasing in the South Atlantic region, yet that region raises only 10 per cent of the hogs that this country produces.

5. Red meat animals are becoming more efficient in feed utilization. Beef cattle and hogs are increasing in the efficiency of feed utilization at the rate of ½ to 1 per cent per year.

6. Red meat animals are becoming more prolific. Each species shows increases in the number of young born per year, or per litter each year. This gain has ranged from 8 to 20 per cent over the last 30 years, but compared to the poultry industry we still have a long way to go.

7. Artificial breeding is growing fast in the dairy field and more slowly in hogs and slow in beef cattle. Research workers are spending a lot of time in this area and they will probably break through in the hog field and we will see an increase in artificial insemination.

8. Live animal marketing is moving away from the central markets.

9. There is less seasonality in marketing and the trend is toward still less seasonality.

10. Contract farming is increasing in connection with red meat animals.

Table 1 shows the number of beef cows compared with dairy cows. We find that beef cows averaged 46 per cent of the total from 1947-56, but in 1957 went to 52 per cent and to 52.1 per cent in 1958. In my opinion this trend will continue—we will have fewer dairy cows in this country. The national average for milk production per dairy cow is a little over 6,000 lbs.

TABLE 1: BEEF COWS COMPARED WITH DAIRY COWS AND ALL COW NUMBERS

Kind of Cow	Average 1947-46		1957		1958	
	Millions	Per cent	Millions	Per cent	Millions	Per cent
Beef	20.4	46.0	24.8	52.0	24.4	52.1
Dairy	23.9	54.0	22.9	48.0	22.4	47.9
Total	44.3	100.0	47.7	100.0	46.8	100.0

per year; compare this with a recent herd average of over 13,000 lbs. in Michigan and you can see we have a long way to go. I believe that we will get increased milk production per dairy cow and that we will be in a position to supply milk and dairy products to the increasing population in the face of a continuing decline in dairy cow numbers.

When we consider the number of calves born as a percentage of cows and heifers two years old and older, we find, as shown in Table 2, that we have made rapid strides in this country. We have come up from a 74 per cent calf crop in 1924 to 87 per cent in 1958. You can see, though, that in calves born to cows and heifers two years old and over, the South Atlantic area was below the national average in the 1947-1956 period, and that even in 1958 there are considerable differences between the areas.

TABLE 2: CALVES BORN AS PER CENT OF COWS AND HEIFERS TWO YEARS AND OLDER

Region	10-Year Average 1947-56	1957	1958
N. Atlantic	84	84	85
N. Central	90	91	91
S. Atlantic	76	79	79
S. Central	82	82	84
West	84	86	89
U. S.	86	86	87

The 1924 lamb crop was 86 per cent and now it is up to 95 per cent.

Let's look at Table 3 on the pigs saved per litter. We

TABLE 3: PIGS SAVED PER LITTER BY REGIONS, FALL PIG CROP

Region	1952	1953	1954	1955	1956	1957	1958	Change 1952 to 1957
N. Atlantic	6.89	6.81	6.91	6.79	6.80	6.83		—0.06
N. Central	6.72	6.71	6.82	6.85	7.10	7.14		+0.42
S. Atlantic	6.42	6.66	6.66	6.65	6.79	6.71		+0.29
S. Central	6.46	6.60	6.64	6.72	6.75	6.76		+0.30
Western	6.58	6.63	6.56	6.66	6.71	6.84		+0.26
U. S.	6.65	6.69	6.78	6.81	7.00	7.06	7.05	+0.40

have the fall record here, but it is pretty indicative of the combined crops.

You can see that from 1952 to 1957 the number of pigs saved per litter has increased by four-tenths of a pig; this is, in my opinion, a significant increase. The 1924 figure was 5.3 against 7.05 in 1957, but I still think

TABLE 4: ARTIFICIAL BREEDING OF DAIRY COWS IN 1957

1. Over 6 million (27 per cent) were artificially bred.
2. 10 states artificially bred over 40 per cent of dairy cows.
3. 43 per cent of Wisconsin's dairy cows were artificially bred (over 1.1 million cows).
4. 2,650 dairy bulls were used.
5. 2,284 cows were bred for each bull in service.
6. 256 beef bulls used in A.I. program.
7. 500,000 cows artificially bred to beef bulls.

we have a long way to go. Swine researchers tell me that the potential is 17 and that number is high compared with our present accomplishment.

In Table 4 we can see what is happening in the artificial breeding of dairy cows. Of 6,000,000 dairy cows, 27 per cent were artificially bred in 1957. Ten states artificially bred over 40 per cent of all their dairy cows. In Wisconsin, 43 per cent of the 1,100,000 dairy cows were artificially bred and 2,650 dairy bulls were used for artificial insemination in this country.

Let's look at the next item—2,285 cows were bred for each bull in AI service. In my introductory remarks I said that we would have a decline in bull numbers and I think that this points out why.

I also mentioned that we have only made a start in artificial breeding in beef herds. In 1957, 256 beef bulls were used in the artificial breeding programs and a lot of these beef bulls were used on dairy cattle.

As I traveled through the West this summer, I heard about a large packer experimenting in several states with an artificial beef breeding program. I think that we are just on the fringes of an increase in this particular area. It is estimated that in 1957, 500,000 cows were artificially bred to these bulls.

How about size of operations? A recent study at Purdue showed that the cost per hundredweight of pork comes down (see Chart I) as you increase the number of sows in the herd. You can see that the gap between the receipts per hundredweight and the costs widen until you get out here in the 50-sow area. There is a trend in animal agriculture toward larger enterprises.

On a trip out West, I visited some of the larger cattle feed lots in Colorado and California. However, I don't

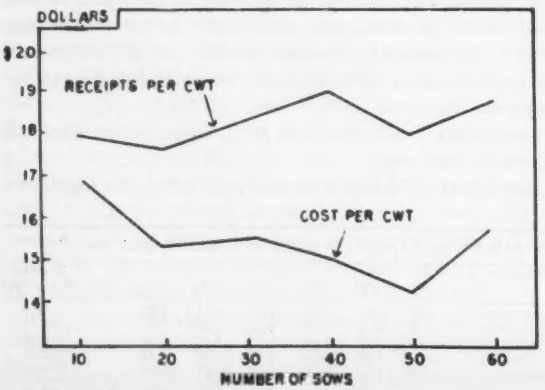


CHART I: Costs fall as sow herd size increases.

believe that it is fair to say that all of the large feed lots are located out West. We have large feed lots developing in the South and in the Corn belt.

In connection with size of operation, it is estimated that in the South one man can handle 65,000 broilers by himself after the first week; if you have four such batches, just think of the number that one man is handling. I have a friend who is milking, by himself, from 60 to 65 Holstein cows. I think it is very possible to handle 3,000 head of cattle per man in one of these big automated feed lots.

I have been told that from 6,000 to 8,000 hogs can be handled per man in an automated feed lot or feeding station. I believe that we are going to larger size operations and more head of livestock per man.

Chart 2 shows that the trend in the marketing of livestock is away from the central or terminal markets.

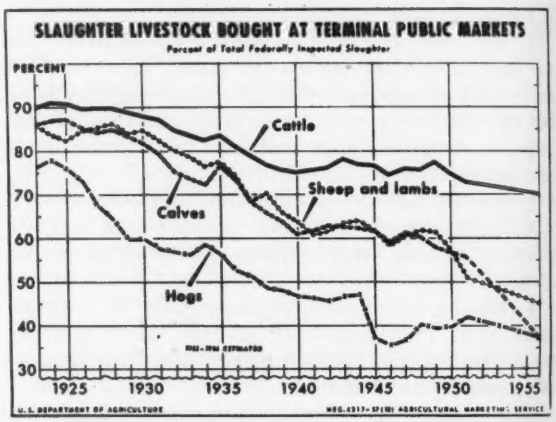


CHART 2: Central markets are losing business.

This chart indicates a sharp decline for all species handled from 1925 to 1955.

Table 5 shows some changes in methods of marketing in Michigan, but I am not going to suggest that these are respresentative of the other 47 states. I would like to point out two or three things here. For hogs, terminal marketing has become less important; for cattle it has become more important; for veal calves it has declined and for sheep it has risen in importance.

TABLE 5: RELATIVE IMPORTANCE, PERCENTAGEWISE, OF VARIOUS LIVESTOCK MARKETING CHANNELS IN 1940 AND 1956 IN MICHIGAN

Market Outlet	Species of Livestock: Hogs 1940	Hogs 1956	Cattle 1940	Cattle 1956	Vealers 1940	Vealers 1956	Sheep 1940	Sheep 1956
Terminal	24.8	10.7	32.9	38.2	22.3	6.8	48.1	57.9
Auction	12.5	57.4	14.2	47.0	21.0	88.1	11.4	33.6
Dealer	13.7	1.6	21.8	1.4	16.9	.3	12.8	.3
Local market	15.4	20.8	9.2	2.4	17.7	2.9	8.6	3.9
Packer	23.3	7.0	12.5	7.2	9.8	1.0	7.2	1.8
Farmer	2.4	.9	6.3	1.1	6.4	1.0	1.0	.0
Other	8.0	2.2	3.1	2.5	5.9	.0	10.9	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The terminal market has declined in importance as the first receiver of the farmers' livestock and the auction markets have increased in importance.

Chart 3 shows the growth in the livestock auction markets in this country. Beginning in the 1930's the number grew up to a peak of 2,500 in 1952, we are now down to around 2,300.

When you consider that there are 3,000 counties in

this country, and then you consider that we have 2,300 auction markets, or an auction in each county or in an adjoining county, we see that their convenience cannot be under-rated.

Chart 4 shows the seasonal course of livestock slaughter for the 1947-1953 period.

We have had some evening out in seasonal peaks and

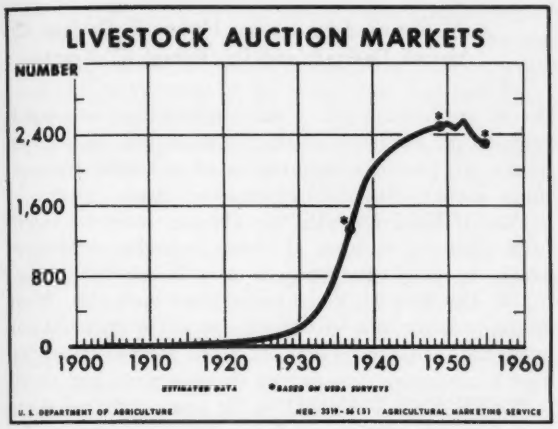


CHART 3: Growth in number of auction markets.

valleys and, in my opinion, we will continue to have further improvement in this area.

I would like to mention some of the significant forces that are at work in the red meat industry.

We have a need for more capital on American farms and ranches. Farmers are endeavoring to get their hands on this increased capital, and are interested in reducing or in spreading their risks. Farmers also are interested in reducing production costs, in keeping old markets and in gaining access to new ones.

Suppliers are attempting to expand their markets and to expand sales of new products, while distributors are attempting to assure themselves of an adequate and stable supply of farm commodities and farm products from those commodities.

Distributors and processors have also become more and more interested in controlling the quality of commodities they produce and sell.

Processors and distributors are also interested in reducing their dependence upon others, and in reducing their buying and their selling costs.

These are important reasons why we have heard a lot about where we are going in agriculture. Someone asked recently: "Isn't there more calmness and less talk about contract agriculture and vertical integration?"

While we may see and hear less about it, I don't believe the activity has died down. I recently had an opportunity to ask each county agent in Michigan what was going on in his county in vertical integration. I can tell you that many things are happening in the little state of Michigan in contract farming and vertical integration in the red meat industry.

I believe that with multiple farrowing, and the scheduling of hog deliveries under some kind of contract, the seasonality of marketings will be reduced.

I would like to conclude my remarks by stating some of the things that should be recognized in this industry.

My first point is that we are living in a time of fast changes. You need to recognize that the structure of your industry is changing; the structure of live markets and distribution, living and eating patterns.

We need to recognize that while our population is increasing by leaps and bounds, it is also changing in age characteristics, education, amount of leisure and the amount of food handling.

I believe that this industry needs to consider that a new meat product may be more like a vegetable or a



PAUSING in front of one of the displays are H. T. Spannuth (left), assistant director of research, Wilson & Co., Inc., Chicago and R. W. Batcher, manager of engineering and maintenance, Rath Packing Co., Waterloo.

dry grocery item than the fresh meat from which it came. When we think about a new product in the red meat industry we need to think seriously and long about what it is, how it is to be handled, the kind of margin we want to obtain and things like that.

I would like to suggest that this industry needs to consider new merchandising techniques that may be needed to encourage production of the kind of animals that the consumer wants. Let me just illustrate here. There is a lot of emphasis on the meat type hog. The meat type hog may yield a ham that weighs 18 lbs. and a meaty loin that weighs 16 lbs. Have we built a tradition in merchandising that the 16-pound loin is discounted and the 12- to 14-lb. loin brings the top price? Have we built up a custom that the 18-lb. ham is discounted because it is a fat ham?

We need to take a look at our merchandising practices and see whether we are really doing the job all the way to encourage the production the consumer wants.

Lastly, I think this industry needs the guts—the intestinal fortitude—to discount poor quality and to give a reward or premium for the kind of quality that the consumer really wants.

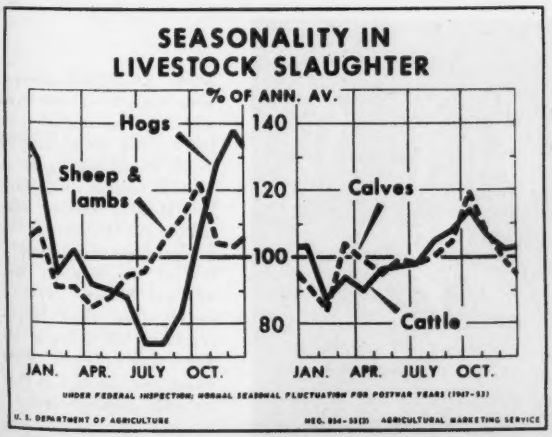


CHART 4: Seasonality of slaughter, 1947-53.

How Can Packers Adjust to Dynamic Situation?

As discussed by speaker Homer R. Davison, Dr. Herrell DeGraff and Dr. Robert C. Kramer.

PRESIDENT HOMER DAVISON: We have heard a very excellent discussion of the future. Dr. Kramer has indicated that we will have plenty of livestock, but that the patterns are going to change. Dr. DeGraff has indicated that we are going to have lots of people to feed, and the patterns there also will change.

Just how do you meat packers fit your operations into this situation? I believe that it is important to realize, as we try to discuss this very complicated subject and pick the brains of these experts a little, that a lot of these changes that we are talking about for the future will have already occurred. We are in a dynamic economy, with a dynamic market and a dynamic production pattern gradually emerging into a new and modern type of thing.

Therefore, if we can discuss this whole subject in terms of what it means to the meat packing industry, then maybe we can produce some ideas that will help meat packers in their thinking and in their job of establishing policies. I have jotted down a few questions with which to start and I hope that we will get into the middle of some of the basic problems.

Dr. DeGraff, from what you said earlier, do you think that the selling of the packers should be concentrated to reach the suburban and teenage groups? You pointed out that this would be a great market for the future, and that it would expand, and I wonder if the packers should start to think in terms of what do we do about this surburban growth?

DR. DeGRAFF: If you want to build the market for meat and meat products for the future to its strongest degree, you should do it by reaching out toward this group, the members of which are going to be the homemakers and families of tomorrow. Many of those people are in suburbia. I am not sure how you reach them to the exclusion of others, but if you are starting out on any products or education, then I think that you surely should point them toward this group.

PRESIDENT DAVISON: Do you think we ought to be thinking in terms of trying to build products in which the particular group is more interested?

DR. DeGRAFF: You have a trend with you. What do the teenagers like—hamburgers and hot dogs. At our house the teenagers always ask when they are going to have hamburgers, even though they have just had them.

PRESIDENT DAVISON: Do you think that there is anything in that area of the older people that the packers should be thinking about?

DR. DeGRAFF: There is indeed. It is a different market—one of small families with lower purchasing power than the average productive family. It is a market that has different demands for food; these are the bland food eaters. There are many products that can, over the years, be sold in considerable volume if pointed toward the senior citizens. They are going to be processed products and I have an idea that in them you will have some of the greatest opportunities in the packing industry.

PRESIDENT DAVISON: Dr. Kramer, you talked quite a little bit about artificial insemination and the fact that there will be a reduction of bull numbers. Do you think this program has implications beyond just a reduction in the number of bulls that may be available?

DR. KRAMER: Let me start out by saying that I believe that 20 to 25 per cent of the hogs we now get can be classified as the meat type. I have been told by many production people that one of the reasons we cannot get over the hump and get more is that we do



MEAT PACKING veterans seen in picture at left have all been associated with the industry for at least 50 years. Photo was taken at 50-Year veteran's breakfast, held Monday morning, September 29. Members of the group shown here—only a few of the veterans who will get 50-year service awards (see page 169)—represent 900 years of industry experience. How would you like to hire that for your packinghouse?

not have enough meat type breeding stock. If we had artificial insemination of swine to the extent that they have it in the dairy field we could increase the number of the meat type hogs rapidly.

Storage and dilution are two very definite problems with boar semen. However, the University of Wisconsin is working in this field and I think that the research people will break through one of these days and that we will then be able to store semen over a longer period of time and will be able to dilute it so that the seed from a good meat type boar can be used more widely and the production of the meat type hog can be increased more rapidly.

One of the problems, of course, is picking out what constitutes a good meat type boar.

Coming back to cattle, as I traveled through the West I found that there are many problems in connection with beef herds that are not found in dairy herds because of the wide expanse that the beef cows travel over. However, I talked with several producers who feel that it will be possible to use artificial insemination in beef herds out West. This is going to mean that we will have fewer bulls in our meat supply.

If we take a look at the breakdown of our beef supply in 1946-47, we see that around 40 per cent came from cows and bulls, whereas the figure is now down to around 31 per cent. Therefore, in the near future, we are going to have only a quarter of our total beef supply made up of cows and bulls. With fewer bulls the meat industry is going to need some kind of bull-meat substitutes for some of its products.

PRESIDENT DAVISON: It looks as though that is a good field for the American Meat Institute Foundation to get into.

Dr. Kramer, you made a statement at Purdue University about a year ago that was very interesting to me from the standpoint of pointing up what integration might mean.

You stated, if I remember correctly, that if 60,000 farmers who were experts in the production of hogs each had 100 sows, and each sow produced two litters a year of eight pigs each, that this would give us an annual crop of about 96,000,000 hogs. Our present hog crop is somewhere around 86,000,000 head.

What caused you to make that statement? Did you want to shock the people into a realization that this could happen, or do you think that a definite trend in that direction is indicated?

DR. KRAMER: You pointed out in your opening remarks that we now have fewer than 5,000,000 farms against over 7,000,000 some 30 years ago, and that the trend in the number of farms in this country is downward. I believe that this trend is going to continue, and when you find that only a couple of million farms produce 90 per cent of the total agricultural output, then you wonder how many farms we are actually going to have. We are losing 100,000 farms per year in this country. With the number of farms declining, and the size of the individual operation increasing, I began to estimate just how many we would need in order to give us the volume of pork that we have been consuming during the last few years. When you get to a 50-sow operation you achieve some worthwhile economies, but I used the 100-sow operation because it had a lot of zero figures behind it.

However, the trend is in the direction that you are talking about.

Of course, as we specialize, there may be some advantages in having one "farm" where they use the sows two or three times a year to get pigs and then, when these get up to 40 lbs. at eight weeks, move them on to another specialized operation for feeding.

PRESIDENT DAVISON: One of the things that we talk about in the packing industry frequently, and which may be just an excuse for not doing so well, is the question of capacity facilities. We have more people to feed, and livestock production has about doubled and the number of packers has about doubled, so that we still seem to be saddled with this old problem of too much capacity.

I would like to ask Dr. DeGraff whether he would like to comment, as a student of this business, in regard to that one?

DR. DeGRAFF: I have just looked at some figures in connection with this matter in which it was said that the packing industry has an over-capacity of some 30 to 50 per cent. I don't know what the excess is because I don't know how to measure capacity. Does it involve two shifts, one shift and overtime, or a 24-hour operation? Is capacity determined by killing animals or by cooler space? I don't know how you measure capacity of the industry, but there is general agreement among



NEARLY 100 meat packer sales managers attended the AMI sales clinic held on Sunday, September 28. Photo shows those attending the meeting in the Crystal Room of the Palmer House. The session was a followup of more extensive clinics staged earlier this year by the Institute.

the people inside and out that the packing industry has too much capacity.

I have wondered why, but I think that the reason is that old packinghouses never die, and neither do they fade away. Once in a while, which is all too infrequent, you do have a fire and one of them burns.

A lot of the older and less efficient packing facilities, it seems to me, furnish a heavy burden of overhead on the industry. They constitute standby facilities, to a considerable degree, through many months of most years. I wonder whether the industry doesn't have a considerable amount of capacity on which it never can make money except during times when we have an overabundance of livestock and everyone else in the livestock industry is in horrible shape? In that kind of situation you do have a few making a little money.

There is the matter as to what you charge to overhead. Do you stop to think what it means when you enter an involuntary storage program? You may have bought too many hogs, but you have no wish to store pork. You end up with distress inventory, which means that you go out and break the price in order to move it.

I would like to ask you who benefits when you get some red figures? Possibly you bought more hogs than you should have, and some processor got better prices for the time being. Furthermore, some livestock producers may be a little better off, but you may have dissipated not only your earnings but also a little of your capital through this procedure. Of course, when you sell below your own price list some people would say that possibly the consumer may derive some benefit.

However, I want to emphasize to you that these are short-run effects, and I wonder who gains in the long run? Is this the reason why you do not have enough earnings so that you can modernize the industry?

If this is true, it is one reason why this industry remains less efficient than it ought to be, less efficient that you know how to make it and less efficient than you want to make it. It means that you go along operating with continued high fixed costs and very high overhead.

Given this situation, and given the further fact that new enterprises can come into the packing industry with relatively small capital, new units do come in and oftentimes operate quite successfully under the umbrella of your high average costs. These firms prosper under the umbrella of the cost structure that you hold up for them.

We end up with a total cost pattern for the industry that is higher than it ought to be. I would like to suggest that in this situation neither the consumer nor the producer benefits in the long run.

What do I mean by that? Simply, that it is not in the consumer's interest, and it is not in the producer's interest, to have any part of the food business operating with too low a profit margin. In the long run it means that less money goes back to the producer if your operations are unprofitable, and it probably means higher average prices for the consumer.

When I say profit margins are too low, how big should they be? They ought to be as big as your competition will let you have, and I suppose they are now. However, the only real measure of profit level is that the right level is the one at which the enterprise attracts the new capital it needs.

When your profit margin lets you do that, it is adequate. I know of no other measure as to what a proper profit margin is except that it will let you attract the necessary new capital for modernization, expansion, new locations and other facilities, and get that money in the capital markets.

I believe that if, as, and when you operate so you can do that, you are then operating so that you can best serve both the producer and consumer. I am very much interested in the producer, and I am a consumer, so that I am naturally very interested in how the thing goes in both directions.

How do you solve this problem? That is the next chapter of a big book.

PRESIDENT DAVISON: That brings up, of course, the question of what does govern the individual packer's production. Does he think in terms of facilities governing the production that he will offer on the market?

DR. DeGRAFF: It is a contribution to overhead.

PRESIDENT DAVISON: I think so, too. It seems to me that one of the things we need to take a good hard look at is how do we determine what our production should be. Should we determine it on the basis of how we can sell the product on a basis that is profitable within the confines of the formula? Dr. Kramer, what do you think about this area?

DR. KRAMER: Two weeks ago I spent quite a bit of time with a consultant to business. He works very closely with business firms not in the meat packing industry. His comments seem to bear on this discussion.

He made the point that increased volume is not the only answer for low profits. He had recently worked



PART OF CONVENTION crowd near the desk of The National Provisioner prior to the sausage processing session on Saturday morning. The publication's directory of hospitality headquarters was a service much used by conventioneers in finding friends.

with a company which thought all it needed was more volume, and he helped this company by breaking down its expenses into fixed and variable costs. This is not an easy thing to do. He was able to prove to the company that by operating as it was, the more volume it handled, the more it was going to lose. They had to change completely the way they were doing business, and increased volume was not the answer.

I know all of you have good accountants and accounting systems, and you know, from day to day and week to week and month to month and from period to period, how you are doing. However, I would like to suggest that you consider not only your total costs and your average costs, but find out what an additional 100 hogs might do to your costs. Find out what these incremental or, as the economists say, these marginal costs, do to your total cost structure.

I think that you will agree with me that on the selling side there is not one price at which product moves, but that there are different classes of customers and there may be a different price pattern depending upon the volume the customer takes and other things. You must relate the volume which will permit you to operate at a very low increment of cost with a volume that you can sell (given your price structure) your company's products. In other words, integrate both ends of this thing into an operation which will make money for your meat packing company.

PRESIDENT DAVISON: You are saying, in effect, that while we do a pretty good job of determining what these costs are, the problem is to get the facts used. Down through the decision-making organization of a company they must have the tools and know how to use them, and think of them in terms of a broader, rather than a narrower, aspect.

DR. KRAMER: This business consultant told me that several companies he deals with believed they knew their costs, but actually they didn't know what their costs really were.

PRESIDENT DAVISON: That, of course, may be true of us. I was very much interested, Dr. DeGraff, in the rather challenging statement that you made to the effect that the housewife does very little to dictate her preferences until new items are offered. That is a challenging statement.

The industry has usually believed that the housewife tells us what she wants and pays what she will pay, and there you are. If you think that she doesn't do too much dictating with respect to preferences, what do you think her attitude is with respect to price? Is she as price-conscious as we think she is?

DR. DeGRAFF: Certainly she is price-conscious; she is always price-conscious. She goes into the store and she looks around. As you said in your introduction, she buys in large part on impulse, choosing that which appeals most to her in terms of the combination of product and inherent service, at what she thinks is the best price. She is operating with very sharp price consciousness in choosing foods.

If you don't believe it, go into the stores and watch her shop. Stand back in a corner out of the way, but let the store manager know what you are doing so that he won't be surprised. Stand there and watch her go up and down the line. She picks up this package and looks at it; maybe it goes into her basket or back on the shelf. You can watch the wheels working while she is doing it. It is a fascinating thing to watch a housewife shop. She is product-conscious, service-conscious, price-conscious, all wrapped up in one package.

The reason I am emphasizing the discretionary spending power that the American people possess is simply this: While we are a people who have higher total spending power than any other people ever had, it does not mean that we have free money to throw around. By the same token that we possess more spending power than anybody else ever had, we are subject to more demands on that spending power than anybody else ever had.

Mrs. Housewife is trying to decide between a higher-priced dinner tonight, or maybe a lower-priced dinner, and money enough to go to the movies or some other place. Maybe she is trying to decide on a broader basis. She will put this much money into food and this much of the budget to buy some new appliance. She is thinking all the time about how she is going to use money for alternative purposes. There are many people looking for each of her dollars.

PRESIDENT DAVISON: Both of you gentlemen made the point that we have got to prepare what the consumer wants and give it to her the way she wants it. You also pointed out that the American people have this money to spend over and above the cost of necessi-



FRIENDS FROM BOTH SIDES of the Ohio river—representatives of The H. H. Meyer Packing Co. of Cincinnati, Ohio, and the Fischer Packing Co. of Louisville, Kentucky—fall into an informal and congenial group when the cameraman swings his lens momentarily in their direction.

ties. Food, of course, is a necessity. Do you think we have as much chance of success with respect to getting some of that extra spendable income as some other people have?

DR. DeGRAFF: Even the basic living costs of the American public are a combination of those things which are essential and those things which are anything but esssential. Let me put it in other terms by talking about an automobile.

Basically, I suppose, we buy an automobile for transportation—or do we? How much do we spend for transportation, and how much do we spend for Detroit-generated ostentation? I don't know. How much of our clothing money goes for protection and comfort, and how much of it goes for something else?

DR. KRAMER: I am reminded that the average homemaker has a thousand meals per year to prepare, and from studies we have made at Michigan State University, she would like more and more new ideas. Yes, I believe the industry has done a good job in giving her ideas about the ways meat can be used, but I think there is still a long way to go. I think maybe we can grab a little bit of this discretionary money if we can produce new ideas about how to use different meat products in the preparation and serving of meals.

PRESIDENT DAVISON: These problems that the packing industry has, and that the individual company have, embrace the so-called "football" items. I am a meat packer. I have a pork loin. A peddler has a pork loin, and they are much the same. There may be a little difference in trim, or a little difference in the method that is used to present them to the buyer, but, by and large, they are a good deal the same.

I believe about 65 per cent of the production in the meat packing industry is in that area. We sell a carcass of beef, or we sell fresh pork. How are we going to upgrade that product? How are we going to get down into the football area? How are we going to get it away from the other fellow? Like flour or wheat, these products sell on an auction basis. How can we get some results from the standpoint of that kind of product? What are your views about that?

DR. DeGRAFF: I am not sure you are going to get it all out of that stage. The greatest price changes take place—let's talk about pork cuts for a minute—in the green product. The smallest price changes take place in the products that have been carried through closest to the process-finished, consumer-ready, consumer-branded stage. The farther you can go along that route, the less price variation you have.

This interests me from a different point of view. This is an industry without any capacity to hedge, except as you take a product through from the green stage closer to a finished, effectively consumer-franchised product.

With some products you can do this, but with some others you cannot do it. You can do it quite effectively with hot dogs and other processed and branded meat items. You are left with some other things, such as hams, maybe bacon, and fresh loins, that are very difficult for you to brand and carry through to gain an effective consumer franchise. Probably this part of the total meat business is always going to remain a low-margin, competitively-priced kind of trade, in which only that plant which is more efficient and which is buying close to what its weekly trade is going to take without breaking the price sheet, is going to find profits.



SECOND AND THIRD generation in meat packing business. John F. Krey III (left), and John F. Krey II, both of Krey Packing Co., St. Louis. The late Fred Krey was a president of the Institute in 1915-16, while John Krey II has served as chairman of the board.

PRESIDENT DAVISON: Maybe, then, we should take a leaf out of the other fellow's book. Maybe we can break up this loin. Dr. Kramer, you mentioned this morning that you thought we were tradition-bound with respect to selling pork loins on a weight basis with the lights favored. Along comes a new heavier but meatier kind of pork loin, and it still is viewed by the old standards. We don't fish it out of the mill and merchandise it on the basis of its merit. Perhaps we ought to think in terms of breaking up this pork loin.



COMING AND GOING, sitting or standing, talking or wrapt in dreams, the crowds in the lobby at the Institute convention provide a good cross section of the varied interests and activities of the many "management" people in the meat packing industry.

Maybe we had better cut off the two ends and bone them out and make roasts, and sell the center part which seems to be in most demand. In other words, make some sort of a radical change with respect to merchandising some of these football items.

I have been amazed, for example, to see the demand that seems to exist for pig hocks and spareribs, which are not the finest sources of protein from the standpoint of cost, while hams and pork loins go begging. Do you have any thoughts?

DR. KRAMER: I would like to ask this question: Has a better merchandising or educational job been done on pig hocks and spareribs than on pork loins?

PRESIDENT DAVISON: The barbecue business has picked up a little bit. Do you have any views, Dr. DeGraff?

DR. DeGRAFF: Just about the same. I think the barbecue business has an awful lot to do with the demand for spareribs, which are awfully spare eating in my book, but I don't think you ought to say that the ham and the loin go begging; it is just that all the profit gets squeezed out of them. You aren't going to make any money on them unless you are operating more efficiently than the other fellow.

There are just three ways to make money in this business: You can buy cheaper, if the competition will let you, and it won't. You can sell higher, if the competition will let you, and it won't. You can save money in operations.



LOOKING over notes are F. P. Neff (left) and H. W. Hamilton, sales manager, both of The Tupman, Thurlow Co., Inc., New York City, shown in the top photo. In the bottom picture Bill Scott (left), sales manager and Jack White, Midwest sales manager, both of Fibreboard Paper Products Corp., San Francisco, Calif.

Don't tell me you can't, because one packer is going to buy his wife a mink coat and somebody else is going to go without a coat on the basis of whether or not they do the last-named.

DR. KRAMER: It seems to me we are talking about this: Times are changing. There are more teenagers and more old people. Maybe there are opportunities here with teenagers' diets and in geriatrics, etc. We have population shifts. We have 16-lb. meat type pork loins. We have 18-lb. meat type hams. Is the meat packing industry flexible enough to take advantage of these changes? Is it in a position to see one of these changes coming, and to get in there, with one firm taking advantage of the changed situation, just as a supermarket monopolizes an innovation for a short time before it's through the industry? I think the industry needs to be a little more flexible.

DR. DeGRAFF: I agree. You are frozen to too much of a capital commitment in bricks and mortar on which the best you can do is about a 2.5 per cent per year depreciation rate. You are living in times when you can't plan that over those 40 years a plant will be the right kind of a plant, in the right location, and laid out to handle products most efficiently. The pattern of change is too rapid and extensive for you to live successfully with 40-year commitments.

Somebody needs some education on this point. I doubt whether it is the industry so much as it is some of the people who make regulations by which the industry must live.

DR. KRAMER: I have been working with an industry committee at Michigan. We talked about changes there, too; it is a very popular topic of discussion. There were a lot of changes in the 1940's and 1950's. We are going to have faster changes in the future.

PRESIDENT DAVISON: All of this would indicate, if nothing else, that as far as architecture and plant construction are concerned, we ought to think in terms of plants that can be put up cheaper and retired faster to accommodate ourselves to population mobility.

DR. DeGRAFF: Think of it in this way: I was talking recently with a fellow who was debating whether or not he would stay on the farm on which he had been raised, and which his father had inherited from the grandfather. The young lad was properly saying, "How can I make any money working with grandfather's farm?"

Then he said, "I wonder how much money father ought to give me to take this farm as a gift, which I would then invest to help pay the losses I know I am going to have on grandfather's farm."

I wonder how many packing plants you have which I would take as gifts only if you would pay me X amount of money? I wonder how many plants you might build today that in 25 or 30 years from now someone else will say, "I will be glad to take and operate them as a gift, if you give me X amount of money along with them to help offset their losses."

This situation points up the need for flexibility.

PRESIDENT DAVISON: Do either of you gentlemen have some advice to give us more specifically?

DR. KRAMER: You know, it is not easy for us to sit up here and tell this group of meat packers how they should operate.

However, I recently visited with a farmer and we were talking about changes on his farm. We were talking about all of the equipment he had, and he told me that there were three important tools he used today which were not new tools, but ones which his father had also used. These tools were a piece of paper, a kitchen table and a pencil.

I think it would be good advice to take these three tools, in connection with your own particular company, and analyze the shifts and changes in your own particular area and that of your competitors. I think you people must make your own decisions as to how you are going to operate.

DR. DeGRAFF: I agree. However, as I look at this

business I think that probably your No. 1 problem is that of overhead. I have been wondering how I would start out to attack overhead. In that connection, I came up with three points, and it seems to me that the answers have to be derived at the same time.



FATHER AND SON —Richmond W. Unwin, assistant secretary, Reliable Packing Co., Chicago, and R. W. Unwin, jr., of E. I. DuPont DeNemours & Co., Inc., located in Wilmington, Delaware.

What is your sales potential in the markets that you have available to you without going out and breaking the price scale?

How can you adjust the overhead to fit that volume?

How do you go into the market and buy to fit these first two points?

PRESIDENT DAVISON: I have tried to put down a few points that are worth noting.

One of them certainly is that we do have a fine picture ahead from the standpoint of livestock production. We are going to have products to sell.

It also seems very clear that we are going to have lots of people to feed, and that there should be a wonderful opportunity for the meat packing industry.

The three areas of selling, buying and operations are the focal points of control for management. After all, this is a management job. Each individual company is different; each managerial undertaking has its special problems. Here are a few things to remember.

A good share of the time there seems to be what we will call "excess capacity" which makes a contribution to overhead. Each of us could ask his competitor to reduce his capacity as a corrective measure, but your competitor isn't going to be the fellow who fixes your business. You have to be the fellow that does that.

On the selling side we are dealing with a business in which the only hedge is to carry the product through as cheaply as possible to a processed form. This is nothing new but emphasis on that factor has a valid spot in our policy determinations.

It has also been pointed out that it isn't total overhead but rather the overhead per unit that counts, and that overhead varies from firm to firm and requires a definite policy with respect to each individual firm.

The gist of this discussion seems to be, first, that we should cut overhead to the bone. That is one of the basic things that must be done in this industry. Maybe some of the overhead we have is traditional and doesn't need to be a part of our cost structure today and in the future.

Second, it has been suggested that it is proper and sound to equate volume to market; in other words, to produce a little bit less than can be sold, and to reduce, even at the expense of physical capacity, the overhead unit costs. We should explore the spots that are the best and then concentrate in those areas. After that, if the cost structure is still too high for profits, the only recourse we have is to reduce it still further.



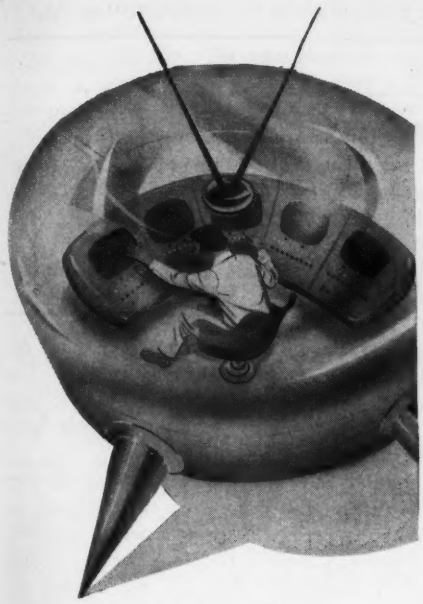
FILLING OUT registration cards are Burton Neesvig, owner of Neesvig's Madison Packing Co., Madison, Wisconsin, and Mrs. Jean Neesvig.

In buying raw materials, slaughter should control volume, but volume should not control the packer's operations. Therefore, with plenty of livestock, and plenty of people, and careful attention to overhead—especially overhead on facilities now obsolete—and emphasis on scientific management, this industry has a great opportunity for service and profit.

EXHIBIT put on by the American Meat Institute Foundation drew great crowds as the conventioneers attempted to test their scientific knowledge on electronic question board shown in photo at right. Photo at left shows Sheldon Moline (standing), research associate, and Dr. J. B. Fox, associate biochemist, both of the AMIF, readying the Foundation brochures which were distributed at the display.







CHANGING PATTERNS

Their Effect on Operations in the Meat Processing Plant

G. L. Scott of Midwest Research Institute Leads Off



G. L. SCOTT



H. WALLACE



A. MAURER

MANY of the operating problems which you face are unique to your particular industry. Others are common to many industries. An awareness of the action taken in other industries to eliminate operating problems through mechanization and automation is advantageous.

Last year, you heard a speaker from the automotive industry discuss possible operational improvements based upon their industrial experience. Our discussion this afternoon will be on the same general theme, but it will be more concerned with the general philosophy of automation and mechanization. My purpose will be to answer indirectly such questions as:

1. What is automation and how does it differ from mechanization?
2. What are its requirements, advantages and disadvantages?
3. What approach should be followed in applying automation to a process?
4. How do the characteristics of an automated process compare with those of a mechanized process?
5. What effects would livestock supply, consumer demand, and product variation have on an automated meat packing plant?
6. When do you adopt automation and when do you mechanize?

EVOLUTION AND PHILOSOPHY OF AUTOMATION: If we were to select the basic elements necessary to accomplish useful work the list would probably read:

1. Something to work with.
2. Something to do the work.
3. Something to decide what and how the work should be done.

The usual physical counterparts of these three basic work elements are tools, a power source and a control source. When these functions are properly coordinated, the result is useful work. How these functions are accomplished determines whether the work is a result of a manual operation, a mechanized operation or an automated operation.

It is interesting to trace the evolution of the concept called automation, for two reasons. First, it illustrates the result of man's continuing effort to improve his way of life, and second, it serves to create an understanding of the requirements, advantages and limitations of automation.

Primitive man accomplished work with what he had available—his hands, his muscular development, and his mental abilities. Much later, man's first efforts to increase his productivity resulted in the lever, the wheel and axle and other simple machines. These all characterize improvements in the first element of work—tools. Man soon learned to supplement his strength with animals—introducing a long series of improvements on the second element of work—power source. Then, in the late 1700's, James Watt broke the power barrier with the first successful mechanical prime mover. The resulting marriage of tools to a source of power ushered in the great industrial revolution and the beginning of an era of mechanization.

With two of his goals essentially accomplished effort

was begun on the most complex and subtle element of work—the control function. Many control decisions were found to be routine and to occur in some periodic manner. Cams, linkages and other mechanical means were developed and used to supply these recurring, routine control decisions. Released from the routine elements of control, man assumed new dignity and was freed to perform more efficiently the complex control functions of industry.

During the early and middle 1900's, mathematical control theory was expanded and clarified. This work formed the basis for World War II control applications on such devices as: automatic firing controls, gun director systems and proximity fuses. Modern man has, at last, acquired the technical ability to combine tools, prime movers and controls into the integrated production system we call automation. In principle at least, the evolution of the machine is complete.

AUTOMATION-MECHANIZATION: The difference between automation and mechanization lies in how the control function is performed. If human assistance provides part of the control function, the process is mechanization and the control system is called open loop—a human providing the vital missing link for complete control. The control system in an automated process permits operation without direct operator attention. This approach to control is called closed loop. The feedback principle makes closed loop control possible. It allows a control system to continuously evaluate the performance of the process it controls. This evaluation is based on a comparison of actual process per-

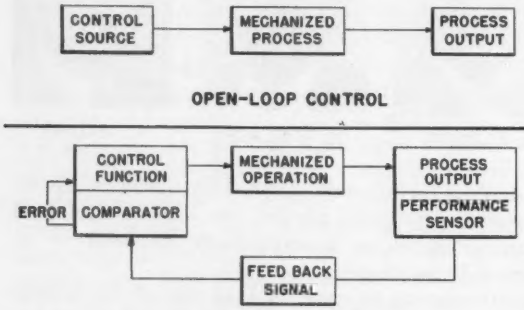


FIGURE 1: Control is the key factor.

formance with desired process performance. The utility of the principle of feedback can easily be demonstrated if you will close your eyes the next time you light a short cigar. In this case, the eye provides the feedback or error sensing signal for the brain, which controls the system output—the position of your hand. Figure 1 shows the basic elements involved in both open loop and closed loop control systems.

To apply closed loop control to a process requires a very complete knowledge of its operating characteristics. The generation of the feedback signals, and the response of the corrective actions must be matched carefully to the process characteristics if stable operation is to result. Continuous, inherently stable operations, like those found in the chemical processing industry, are good candidates for closed loop control application. Semi-continuous and batch-type processing operations render

FIGURE 2: CLASSIFICATION OF PRODUCTION SYSTEMS.

DESCRIPTION	ACCOMPLISHED BY: TOOL	POWER	CONTROL	CLASSIFICATION
1. MANUAL EFFORT	HUMAN	HUMAN	HUMAN	MANUAL
2. MANUAL EFFORT WITH TOOLS	MECH.	HUMAN	HUMAN	
3. MANUALLY CONTROLLED POWERED TOOL	MECH.	PRIME MOVER	HUMAN	MECHANIZATION
4. MECHANICALLY PROGRAMMED & POWERED TOOL	MECH.	PRIME MOVER	HUMAN MECH.	
5. AUTOMATICALLY CONTROLLED & POWERED TOOL	MECH.	PRIME MOVER	ELECT.	AUTOMATION

overall feedback control ineffective due to the many delays which characterize these processing methods. The best that can be expected in this case is minor loop controls for those processing operations which have continuous characteristics.

The human mind has the unique ability to develop control responses through a process we call learning, or experience. When a person learns to operate a power tool or some other mechanized function, we say he has become skilled in this work. Actually, his control responses have been highly developed and the function he performs operates under very effective closed loop control. Only within the last three years have man-made control systems approached this phenomenal ability. "Teleological control," as these systems are called, seeks to optimize process variables by continued pre-programmed experimentation. This permits a degree of flexibility in the accommodation of process variables which has hitherto been unattainable. With such advances as this in control technology, the scope and number of automation applications will undoubtedly increase in future years.

The term, automation, is commonly used to describe a very broad range of production methods. Any specific meaning the term had has long since been lost. It's almost like trying to describe trucks, buses, cars, bicycles and motorcycles by the broad term vehicle. For our purpose, automation will specifically mean a production method which is self-powered, self-controlled and self-correcting. Anything less than this will be considered as mechanization or partial automation. The logic behind this classification is illustrated by Figure 2.

Increased worker productivity is the principal advantage offered by automated operations and is usually the major objective sought. Reduced direct labor costs, improved product quality, increased plant production capacity and improved working conditions are other desirable results of automation. Like any other improvement, automation represents a compromise between desirable and undesirable characteristics. Common consequences of automated operations are: decreased product flexibility, increased indirect labor costs, the need for workers with higher skills, particularly for maintenance activity, and the need for a stable production volume to insure economic operation.

AUTOMATION FOR MEAT PACKING: In the time remaining, the general problem of meat processing improvement will be considered—initially, through mechanized operations and, finally, through automated operations.

As a first step, consider the process improvements

initiated by progressive firms within your own industry. There are undoubtedly a number of plants which could serve as examples. Two which I have visited are the Swift & Company St. Joseph plant and the Geo. A. Hormel & Co. Fremont plant.

The Swift plant uses on-the-rail-dressing in its beef operation and represents, to me at least, a significant improvement over the conventional killing floor operation. Techniques which characterize this newer beef dressing method are:

1. The carcass remains on an overhead conveyor throughout the dressing operation.
2. A long elevated working deck allows frequent floor washdown without operational interference.
3. Pneumatically-powered hand tools are used extensively in the mechanized dressing operation.
4. Many of the skinning operations are done with power knives.
5. A mechanical hide puller is used to separate the hide from the sides of the carcass.
6. The heads are processed on a separate conveyor synchronized with the carcass conveyor to permit identification of these respective items.
7. A traveling sanitary pan-type conveyor receives the viscera after its removal from the carcass; minimizing the manual handling usually associated with this particular operation.

It was evident that this mechanized beef dressing operation had been designed to reduce manual handling, improve productivity, simplify cleanup and improve working conditions.

The Hormel plant in Fremont, Nebraska, uses a hog immobilizing and bleeding operation representing a substantial improvement over conventional killing methods. A mechanical chute at the entry to the immobilizing chamber admits one animal at a time. This immobilizer operates with a 70 per cent carbon dioxide atmosphere and has a belt conveyor in its floor to discharge the unconscious animal onto the bleeding conveyor. This CO_2 concentration will cause unconsciousness for about 45 seconds. The animals are manually positioned, on the inclined bleeding conveyor, with the head slightly lower than the rest of the body. Bleeding is accomplished as the animals move up the incline. A stainless steel collection trough at the edge of the belt drains the blood into a sump for further processing. At the top of the conveyor the carcasses are discharged into a scalding tank and fairly conventional processing follows.

These two plants exemplify the result of activity by progressive management and technically competent personnel. They also illustrate the benefit to be derived from the intelligent application of existing methods and equipment and the development of special mechanized equipment to meet particular needs.

SYSTEMS APPROACH: Automation, as a future method for meat processing, requires a unique approach if its full application potential is to be realized. The systems approach meets this basic need. You might think of it as a means of acquiring proper perspective—something like looking through the wrong end of a telescope. Each factor or element of a system is considered in terms of its functional relation and effect on other elements and on the system as a whole. Whether

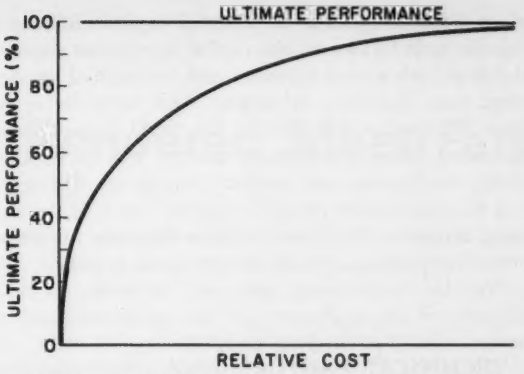


FIGURE 3: Costs rise with performance improvement.

this consideration is made by mathematical techniques or by logical, intuitive analysis will depend upon the complexity of the application and the detail required. The important point is that automation requires a thorough re-evaluation of present processing methods. The dramatic productivity improvements offered by automation will not be accomplished merely by control magic. These benefits can only come from a concerted effort to develop processing systems which, by their very nature, can function, independently of direct human effort. When this is accomplished modern technology can, in most cases, develop the necessary functional elements to perform the required operations and integrate them by a closed loop control system. The challenge is great, but so are the benefits.

When to adopt such revolutionary improvements is always a difficult question to answer. Military experience in the development of maximum performance aircraft indicates that procurement costs increase exponentially as the point of ultimate performance is approached (Figure 3). In this figure, no specific values have been assigned to the coordinates of the curve. It is presented only to illustrate a condition called the point of diminishing returns. Where this point occurs will vary with each case. Its significance is that evolutionary improvements can be effective only up to a certain point. After this, it is necessary to seek a fundamentally different or revolutionary method of accomplishing the same task, if further increases in performance are to be economical.

In practice, the actual point of diminishing returns may or may not be established. The usual approach to improvement evaluation involves a consideration of both economic and technical feasibility. In the meat industry economic feasibility would require an investigation of such factors as: the stability of livestock supply, the stability of the finished product market and its volume. These factors are related principally to the flexibility required of a meat processing operation. The most flexible operation is one using a minimum of equipment and a large amount of labor. The least flexible is an automated operation. Within this area lies the proper compromise between productivity—a relative measure of process efficiency—and flexibility.

The obsolescence of present process equipment and building facilities serves as a valuable physical indicator when replacement or modification is considered. Probably the most important economic factor is the assurance

of an adequate return on invested capital. Related to this are such factors as: the capital investment required, the direct labor costs expected and anticipated development costs, including debugging. This latter factor will have increased significance as the trend to automation continues. More development activity will be required, giving rise to costs not normally considered. Debugging is a non-productive period in the life cycle of development hardware. This is to eliminate the many unforeseen operating problems which always seem to arise.

Probable maintenance costs and probable operating efficiency of the equipment are two additional economic factors related to invested capital return.

TECHNICAL FACTORS: Besides the economic factors enumerated, a number of technical factors exist which should be considered in any overall evaluation.

The importance of the basic processing system has already been emphasized. The nature of the process, that is, continuous, semi-continuous or batch, definitely affects its adaptability as far as automation is concerned. The product itself also has a significant effect. In the meat industry, custom has established the various cuts of meat and other processed products supplied to the customer. The consumer, therefore, has a rather definite idea of what these various products should look and taste like. This fact practically eliminates any possibility for process improvement through a redesign of the product—a very effective and often inexpensive way of accomplishing process improvements.

When standard components which have been tried and proved by industrial operation can be used in a process, the technical problems are reduced considerably. Equipment or components requiring development activity to provide special functions pose a little different problem. Functions supplied by mechanical means are usually quite straightforward. Complications can arise when abnormal temperatures, high operating speeds or other unusual operating conditions are required. The development problems of an overall process control system are anything but straightforward. I don't mean to imply that a theoretical basis for control system design does not exist—it does. The problem lies in trying to find out the process requirements and control operating characteristics so that a control system can be designed. The need for basically simple processing operations cannot be overemphasized when considering automation.

Overall system reliability is a term which will take on increased meaning as automation applications increase. Newspaper accounts of rocket and missile program activity have created a considerable interest in reliability. A recent report which analyzed the causes for guided missile failures stated that 60 per cent were attributable to breakdown of electronic components, 30 per cent to hydraulic components, and 10 per cent to miscellaneous mechanical difficulties.

The probable reliability of a complete system can be determined mathematically if the reliability of each of its components is known. For instance, assume that ten components are used in a system and each component is 99 per cent reliable. The resulting system will only operate about 90 per cent of the time. If we use 20 of these 99 per cent reliable components, the overall system reliability would be about 82 per cent and failures could be expected nearly 18 per cent of the time. System complexity is one of the main causes of poor reliability. The reliability factor not only affects the maintenance cost but also the anticipated return on investment.

To summarize, then, the approach for meat processing change and improvement involves first, the maximum use of existing methods and equipment to increase the general level of mechanization. Future and long range activity for basic process improvements will be most effective if the systems approach is used. Automation, in concept at least, represents the highest attainment of our present industrial technology. Its successful application will require the conception and development of radically different production methods. How extensively such improvements can be applied is determined by their economic and technical feasibility.

Somewhere in the area between strictly manual effort and the ultimate—automation—can be found a production method which will meet every individual need. The ultimate is not necessarily a requirement if some middle ground meets the needs of a particular operation.



Automated Processing of Rendered Meat Fats

Variety of arrangements to improve fats described by C. E. McMichael of The Girdler Corporation.

THE trend in the meat industry is to consider lard as a raw material since there is a wide range in its physical characteristics. Variations are due chiefly to the food given to the hogs, where they were raised, and their species and age; the processor's method of handling and blending fat tissues before rendering, and the rendering process he employs.

These variables, of course, result in large quantities of non-uniform products reaching the consumer. In one instance, consistency of the lard may vary; in another, its flavor and order, and in still another its free fatty acid content may be the factor to differ.

As is well known, uniform products are more readily and profitably marketed, and for this reason perhaps AMI should consider setting up minimum standards for lard to be sold at retail. The establishment of these standards would probably see inadequately equipped small renderers acquiring modern processing facilities cooperatively to their mutual benefit. This idea will be developed more fully later in our discussion. The introduction of stabilized lard, lard fortified with flakes and texturized, and rearranged lard, gave the meat industry a big boost, and if minimum standards were set up sales should be further improved.

PRINCIPAL PROCESSES: The principal processes employed in the production and finishing of lard are reviewed here in some detail:

a) *Rendering.* The classic dry and wet processes used in rendering lard have changed very little through the years. Today there are several continuous, low-temper-

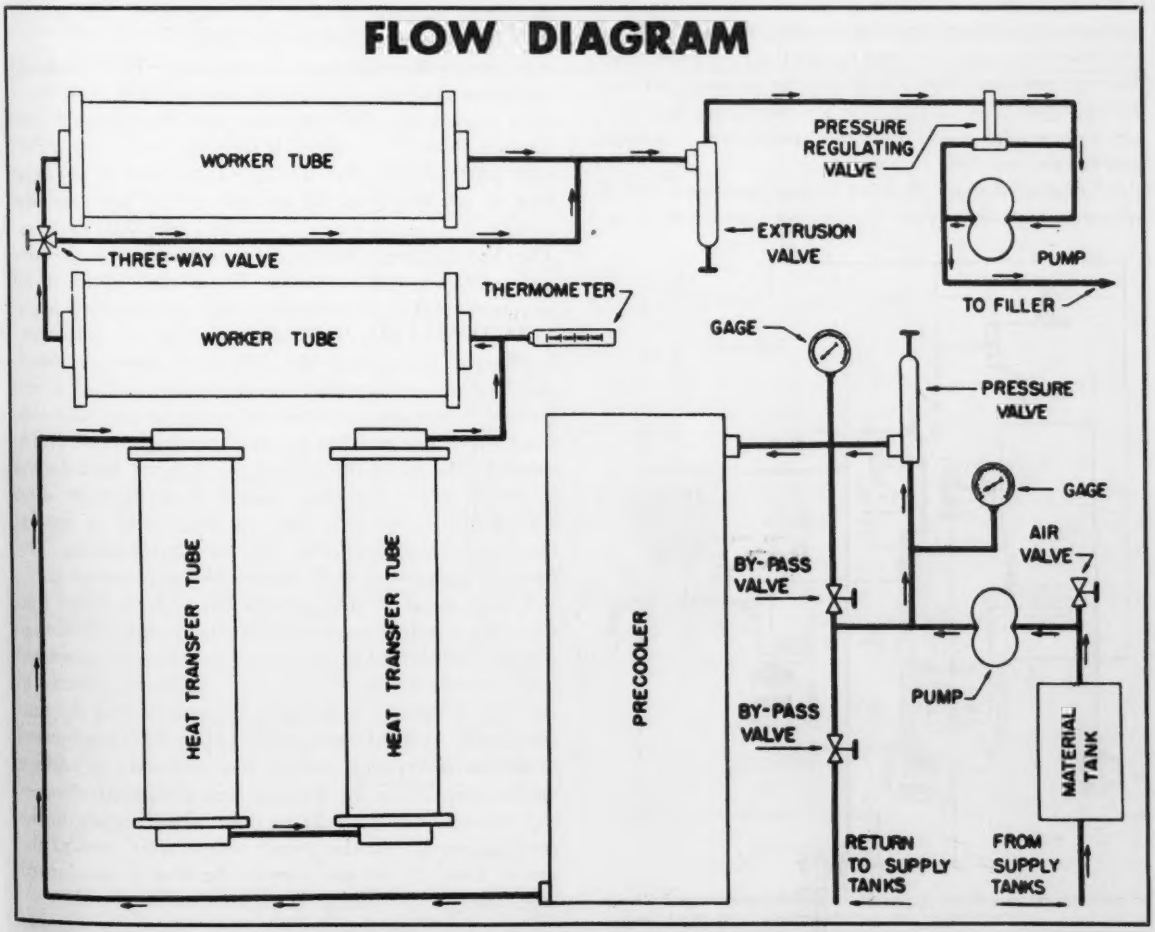


FIGURE 1: How lard is plasticized to a uniform consistency.

ature rendering systems on the market. They represent a fine technological advance since they have enhanced the quality of the rendered lard, and made possible operating economies. These systems are largely automated and demand a minimum of operator attention. The lard produced by these processes is lighter in color, lower in free fatty acid, and improved in keeping quality. The protein recovered is not denatured and is suitable for use in edible products.

While the rendered fat is of better quality than that yielded by the steam rendering process, the lard still has the physical characteristics imparted by the factors mentioned earlier, and will vary in firmness and other properties due to these factors. The processing of rendered lard can go in several directions, from simple texturizing through more complex treatments, such as rearranging and hydrogenation.

b) *Texturizing.* The crystals that are formed when lard is allowed to solidify slowly are much larger than those that are formed when hydrogenated vegetable oil is allowed to solidify slowly. It is common practice to texturize lard by using Votator plasticizing equipment with which the industry is familiar. This results in fine, uniformly dispersed crystals that provide a solid latticework for holding the liquid oil, and the finished product is smooth and homogeneous. (See Figure 1.)

c) *Stabilizing.* Lard is almost devoid of natural antioxidants, so it is standard practice to make up this deficiency by adding antioxidants. Butylated hydroxyanisole, butylated hydroxy toluene, and propyl gallate are the most commonly used. If during the course of processing the temperature is raised, as for example in deodorizing, it is essential to add a suitable antioxidant to achieve satisfactory shelf-life.

d) *Hydrogenation.* A great many processors lightly hydrogenate lard to raise its melting point and to increase its resistance to oxidative rancidity, as seen in Figure 2. Hydrogenation is straightforward and conventional. Usually it is necessary to lower the iodine value only 8 to 10 units to produce a product of suitable consistency. In order to improve the plastic range, it is customary to add a small percentage of lard flakes to this product prior to deodorization. Of course, when an edible fat is hydrogenated it must be subsequently deodorized to remove the characteristic flavor and odor imparted by hydrogenation.

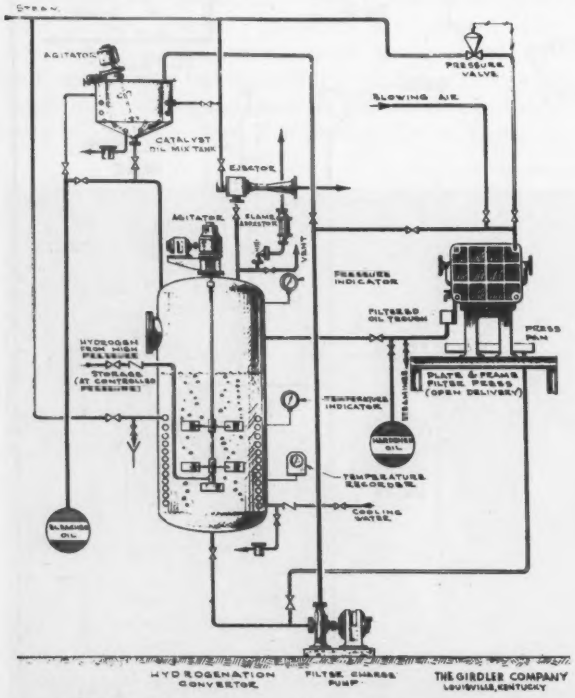


FIGURE 2: Apparatus for hydrogenating lard.

e) *Rearrangement.* This process imparts to lard desirable physical characteristics which improve its effectiveness when used for baking. What it really does is to change the structure of the triglycerides so that the crystallizing properties are modified. This operation is usually carried out on prime steam lard, or on alkali-refined lard. I do not believe we want to get into the techniques of rearranging here. It is sufficient to say that it is a catalytic reaction carried out under controlled temperature conditions.

The catalyst is usually sodium methylate, metallic sodium, or a sodium potassium alloy. The equipment for employing it is quite simple and includes some means for drying the lard prior to rearranging, a tank with coils for heating and cooling and equipped to provide extremely good agitation, and means for separating the foots resulting from the process. However, there are numerous patents covering rearrangement, and it may be that processing licenses are required.

f) *Steam Refining and Deodorizing.* This combined operation as seen in Fig. 3 strips out free fatty acids down to a level below 0.05 per cent, and at the same time removes flavors and odors. It does not make any difference particularly what the free fatty acid of the feed lard is; whether it is 0.2 per cent or 1.0 per cent, the refined, deodorized product will be under 0.05 per cent. The Votator semi-continuous deodorizer is particularly well-suited for this operation. The shallow depth of oil in process makes for extremely high stripping efficiency.

AUTOMATED: This unit process is completely automated. The batch size and cycle time are preset, the heating is controlled automatically, and so is the cooling. There are numerous interlocks so that all conditions have to be satisfied for the cycle to proceed. If, for example, the oil in the cooling tray has not been cooled to the set point, the drop valve will not open to drop the oil out of this tray into the drop tank. A process interruption has occurred, and an alarm sounds. The operator then must find the trouble and correct it.

Really, about all the operator has to do is to see that there is a supply of material in the feed tank and storage room in the finished product tank to receive the processed lard. Periodically he should check his chart patterns to see that everything is in order. Outside of this the unit runs itself. As mentioned earlier, when lard is subjected to deodorization temperature, it is necessary to add an antioxidant. When the Votator semi-continuous deodorizer is employed, this may be done automatically in the right proportion, at the proper temperature, and at the proper time. If, for any reason, the flow of deodorized lard stops, proportioning of antioxidant stops also.

From this discussion it is apparent that processing of rendered lard may proceed in a variety of directions.

Perhaps some consideration should be given to the minimum amount of processing to yield a uniform product regardless of the variation in physical characteristics due to the age of the animal, diet, or rendering methods.

I visualize minimum processing as follows: First, clarification. This would be a simple, light bleaching step. The amount of bleaching earth or filter aid used would depend upon the color of the lard and the amount of solid impurities in it.

Second, blending in some lard flakes to give the product the desired consistency. The amount of lard flakes to be used would depend upon the stiffness of the clarified lard. From 3 to 8 per cent by weight of lard flakes may be required to reach a given consistency. The addition of flakes will bring to some arbitrarily selected consistency any lard regardless of origin.

Third, the blend of lard and lard flakes should be steam-refined and deodorized and fortified with an antioxidant. This will yield a perfectly bland, stable product which will be uniform throughout the year. The processed lard then should be plasticized and packaged. A diagram of such a process is shown here.

COLOR: Lard processed in this manner, as seen in Fig. 4, will be of the same color, free fatty acid content, flavor and odor, and consistency day after day. Minor adjustment in the amount of flakes will compensate for the seasonal temperature difference to which the processed lard is subject. From the standpoint of the consumer this standardization of lard should be very beneficial, whether he is a baker or a housewife. Processing plants of the type we are dealing with here can be provided in a wide range of capacities. The heart of the process is the steam refiner-deodorizer.

About the smallest practical plant has a capacity of 30,000 lbs. per 24-hour day. Larger plants have capacities of 60,000, 120,000, 180,000, and 270,000 lbs. per 24-hour day. We would recommend duplicate units for higher production rates. In a great many plants certain existing equipment may be used as a component. For example, adequate clarification equipment may be on hand, or adequate blending facilities for adding lard flakes may be available. For this and other reasons each plant must be tailored to the user's needs.

The capital investment also varies for these reasons, and because of the physical layouts of individual plants. But, for purposes of illustration, let's think in terms of a plant with a capacity of 120,000 lbs. per 24-hour day to be built from scratch. Then the capital investment broken down by units would be about as in Table 1.

TABLE 1: Estimated Capital Investment for a 120,000-Pound-Per-Day Lard Processing Plant

Clarification	$ 38,000.00
Blending	8,000.00
Deodorization	136,000.00
Plasticizing	30,000.00
Filling	35,000.00
Total	$247,000.00

The $247,000.00 figure is for an uninstalled plant, but it is a complete package with all pipe, valves, fittings,

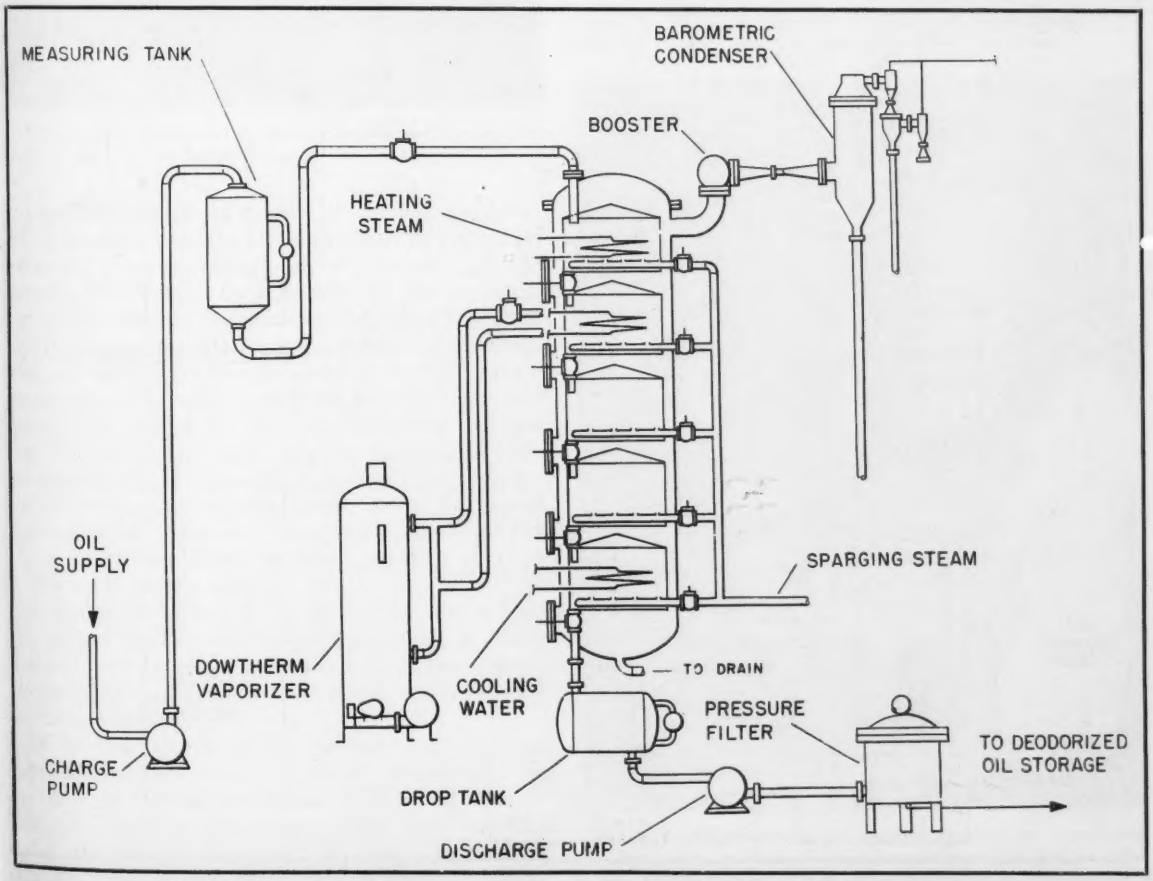


FIGURE 3: Semi-continuous apparatus for steam refining and deodorizing lard.

instrumentation, refrigeration, pumps, etc., furnished. Installation costs will vary from plant to plant, but generally will run about 45 per cent of the equipment cost.

I need not dwell on the obvious fact that as capacity goes up the capital cost per 1,000 lbs. of capacity goes down. For example, a plant with 50 per cent more capacity than this 2-tank-car-per-day plant would not cost 50 per cent more, but probably 25 per cent more.

The approximate direct operating costs for the plant that serves as our illustration are listed in Table 2. (We say direct operating costs because administration, insurance, depreciation and other items of overhead present too many variables to be taken into consideration. It should be borne in mind that the higher the capacity of the plant, the lower the unit operating costs.)

TABLE 2: Estimated Direct Operating Costs for a 120,000-Pound-Per-Day Lard Processing Plant

	Per 100 Lbs. Lard Processed
Clarification	$0.11
Blending	0.02
Steam-refining and deodorizing	0.20
*Plasticizing and filling (average)	0.22
	$0.55

*Will vary depending on size of packages.

These figures do not include the cost of packages. Thus, the cost, giving or taking a couple of cents per 100 pounds of lard processed, is $0.55 (see Table 2).

Now let's take a look at the built-up cost of a lard processed in this way in Table 3.

TABLE 3: Estimated Built-Up Product Cost for Processed Lard

BASIS	
Prime steam lard at	$13.50 per cwt.
Lard flakes at	18.50 " "
Antioxidant at	1.50 per lb.
PRODUCT COST	
Lard	$13.50
Antioxidant at .05 per cent	.75
Flakes at 5 per cent	.25
Processing	.55
	$15.25 per cwt.

Such a product will probably sell for about $3.00 per cwt. higher than prime steam lard. Thus a gross profit of about $1.25 per cwt. should be realized, calculated on a loose basis. The figures given here are based on running the plant at its capacity, and 24 hours per day, the plasticizing and filling equipment excepted.

As mentioned earlier, it is entirely practical for small renderers to establish cooperatively a conveniently located plant of the type we are discussing here.

The final product would be top-quality bland lard, low in free fatty acid, and uniform in consistency and texture. And what is more important, upgraded at a profit to the processors.

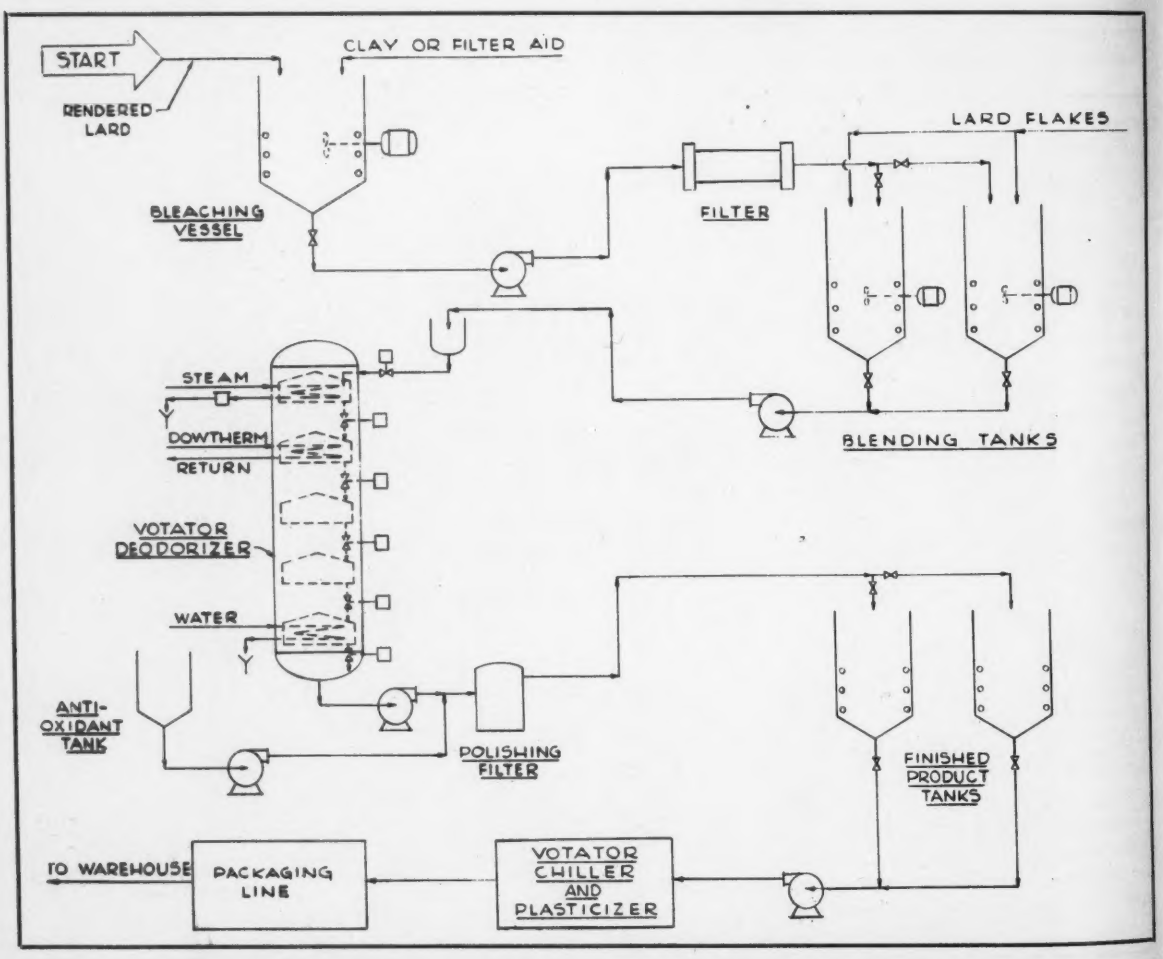


FIGURE 4: Plant for clarifying, hardening, refining and deodorizing lard and adding antioxidant.

Hide Takeup Mechanized at Canada Packers

Digest of a film presentation made by the McLean Machinery Co. and Canada Packers Limited.

JUST as the Can-Pak rail dressing system did away with the stoop in beef dressing, the new Can-Pak hide shaker does away with the stooping, use of the hide horse and other tedious manual effort involved in cleaning, inspecting and bundling cured hides.

The new machine cleans the hides free of excess salt and any adhering dirt at the rate of 150 hides per hour.



AT INTAKE END of hide shaker, operator centers hide so sides flare evenly as they pass the rubber fingers on the cleaning reels.

One operator takes the hide and places its eyehole on the intake conveyor prong. As the conveyor pulls the hide into the machine, he straightens the hide so that it is properly centered. The conveyor travels in a triangular pattern, dipping downward at the intake and discharge ends and reaching its apex for cleaning. As the conveyor moves toward the apex, it pulls the hide over two steel aprons that extend to the floor, billowing out the hide. The spread hide moves past the two cleaning reels, one on each side of the machine. Each of these reels has three arms that are equipped with about 250 rubber cleaning fingers. Clearance between the apron and the fingers is such that all the salt is knocked from the hides as they travel on the conveyor.

At the discharge end the apron extends into a table that spreads the hide. The inspection station, consisting of a roller conveyor and a steel top table, is located here. The machine's table top section slopes downward toward the inspection conveyor.

As the hide approaches the discharge end, the two inspection employes grasp it by one side and slide it from the conveyor top onto the roller conveyor and adjacent table. In this well-lighted section, the hide inspector stands and notes the condition of the hide when the flesh side is in front of him. While the two employes bundle the hide in standard fashion, he observes the hair side.

Bundled hides are rolled on the conveyor to a weighing and machine tying station. One employe weighs and ties the hides and sends them out of the cellar.

Much of the machine is made of stainless steel to prevent corrosion. Two electric motors provide power for the unit; one is used for the conveyor and the other one for the cleaning finger shaft.

The rubber fingers developed to do the cleaning have a long life and about 20 will need replacement in the course of a year's operation. Use of the machine systematizes hide takeup and allows it to be done by a regular rather than an extra crew.

The machine paces the entire operation since as one hide immediately follows another. The time-consuming walking formerly done to get the hide, bring it to the horse and then to take it to the bundlers, is eliminated.

The machine's reels are fully enclosed, not only as a safety measure, but also to expedite the collection of the spent salt and manure in a floor level bin.



SHAKER'S DISCHARGE end forms table on which the fleshed side is inspected as it moves. For close inspection it is placed on roller table next to inspector. Hide is bundled on roller conveyor.

Automation is Coming, Maybe Slow or Fast

Panelists Maurer, Batcher, Gillman, Ransom and session speakers develop some differences in regard to outlook.



R. BATCHER



H. GILLMAN



R. RANSOM

CHAIRMAN MAURER: The members of the panel are: C. E. McMichael, The Girdler Corporation; R. W. Batcher, Rath Packing Co.; H. K. Gillman, Tobin Packing Co.; R. W. Ransom, John Morrell & Co., and Gerald L. Scott, Midwest Research Institute.

CHAIRMAN MAURER: We have heard so much about these question and answer panels being rigged, that we don't want to get sued, so we will tell you in advance that we have a question or two that have been planted. We have asked Mr. Scott to pose the first question for us.

SCOTT: How do automation and mechanization affect the flexibility of an operation?

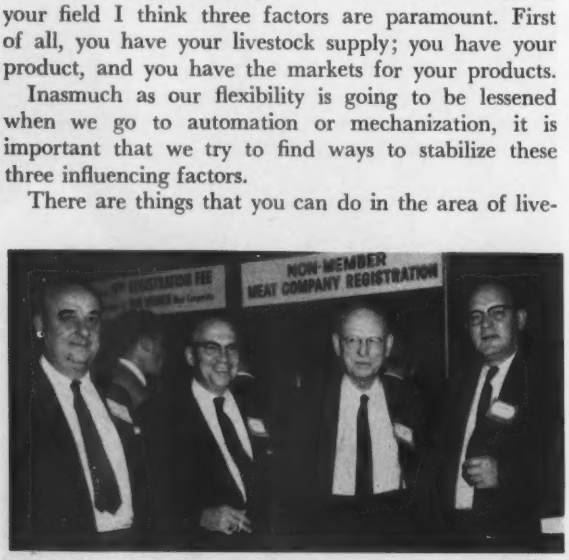
I would like to make a couple of comments on this. So far as flexibility is concerned, a manual operation with a large group of people operating in an area with a limited amount of equipment is, of course, the ultimate in flexibility, but its productivity is questionable.

At the other end of the scale we have automation, which represents the minimum of flexibility with the maximum amount of productivity. Somewhere in this wide area between we have the optimum condition for whatever type of processing operation you are considering for your installation.

When we consider automation or mechanization in your field I think three factors are paramount. First of all, you have your livestock supply; you have your product, and you have the markets for your products.

Inasmuch as our flexibility is going to be lessened when we go to automation or mechanization, it is important that we try to find ways to stabilize these three influencing factors.

There are things that you can do in the area of livestock supply. First of all, they can be effected through research and programs leading to the proper feeding and marketing of animals. We have heard some talk of "vertical integration." Whether we call it that, or just a means of providing a consistent flow of a uniform product which will be more adaptable to our needs, and more adaptable to the limitations which mechanized equipment will impose on the operation, this is the area of interest in livestock.



STANDING in front of the non-member registration booth are (left to right) J. W. Rickord, manager, product control, pH division, Armour and Company, Chicago; H. C. Beal, district manager, Jacob E. Decker & Sons, Dallas; P. J. Thorgerson, general manager, Jacob E. Decker & Sons, Mason City, Ia., and E. L. Lunde, superintendent, Jacob E. Decker & Sons, Mason City, Ia.

Concerning products within your plant, I did mention that consumers have relatively fixed ideas of what steaks and other products should look like. You can't very well take a carcass and extrude and package it in this manner. So, whether you rely on your present products, or whether through research and development you can apply continuous methods to produce new products that may not even be envisioned, or that will have to be developed, these are things that should be considered.

So far as the markets are concerned, this is an area with which I am not particularly familiar.

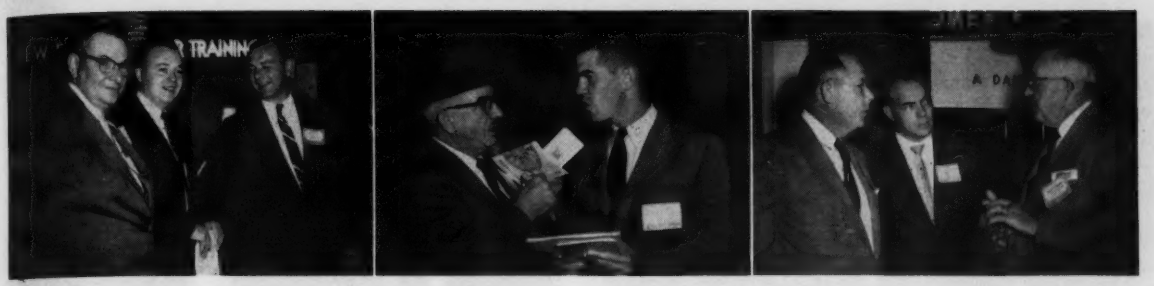
CHAIRMAN MAURER: Mr. Batcher, you have a question. What are we going to do? This sounds good in conversation, but how do we apply it to our plants?

R. W. BATCHER: This panel is supposed to be discussing "What we can do about mechanization and automation." It occurs to me that many times in these meetings we talk about the ultimate, and everybody goes home mystified.

What can we actually do to automate soon the things that each of us has in his own plant? In other words, are there any operations with mechanization possibilities which are not too difficult or too expensive to solve by competent engineering, and measures which might be adopted with a minimum change in current installations?

CHAIRMAN MAURER: Who wants to answer that?

H. K. GILLMAN: That is my thinking; in fact, it is my company's thinking. We might take a trip to the moon 10 years from now, but what are we



going to do now? We must make a profit; that is the basic philosophy in our business.

We approach the problem just as Mr. Batcher has said. What can we do now, with the operations we have? What can we do to cut our costs, and spend money (if necessary, a lot of money) if it will get our money back within a reasonable length of time?

I am entirely in agreement with Mr. Batcher. I have sat in these meetings and listened to people discuss this matter. I listened to Mr. MacDougall of the Ford Motor Co. tell us that we are backward. I do not question that we are backward.

Concerning the integration Mr. Scott talked about, a hog will have to be 220 to 230 lbs. and so many inches long, and so many inches wide, before I will recommend to my boss that we automate the cutting floor. I won't do it until then. I think we are looking at pie in the sky. Let's do what we can do in our plants to cut costs. Let's put in equipment to do the job if we find it necessary to do so.

CHAIRMAN MAURER: Do you mean you don't want to automate—that you merely want to mechanize in a better manner?

GILLMAN: I was going to cover automation later. Mechanization and automation are two different things. You can do both. There are many jobs that we can mechanize, which means that some people do certain things on the line. There are other things on which we can go fully automatic, and those are the things that have to be studied in each plant.

LEFT: Ellis Kline, safety director, Stark, Wetzel & Co., Inc., Indianapolis; John Thurman, safety director, Oscar Mayer & Co., Madison, Wis., and Ray Ellis, jr., National Safety Council, Chicago. CENTER: Talking with Ivan Potts, director, membership relations, the National Independent Meat Packers Association, Washington, D.C., are Frank Adamski (left), technical director, Shellenheimer Co., Rockford, Ill., and Mrs. Josephine Adamski. RIGHT: Seated for a moment's relaxation are (left to right) James Ingram, auditor, Oscar Mayer & Co., Davenport, Ia.; Mrs. Ava Davies, and Thomas Davies, auditor, Oscar Mayer & Co., Madison, Wis.

LEFT: Off to view the exhibits go George A. Blodgett, research chemist, Swift & Company, Chicago; H. F. Bernholdt, food technologist, Swift & Company, and Ellis Kline, safety director, Stark, Wetzel & Co., Inc., Indianapolis. CENTER: Fred Ohse, president, and son David Ohse, vice president, of Ohse Meat Products Inc., Topeka, Kan., who seem to be in the midst of making a rather serious decision. RIGHT: Charles Frey, vice president, and A. J. Frey, sales manager, both of L. A. Frey & Sons, Inc., New Orleans, La., are seen with Harry C. Ferguson, general manager, Florence Packing Co., Florence, Ala., who is doing a bit of explaining.

You can put your finger on any plant represented in the room today and say, "You can do this here and that there." It isn't so, because everybody does things just a little differently, at least that has been my observation.

CHAIRMAN MAURER: Do these films we have seen offer any clue? Are there possible ways of approaching that problem?

GILLMAN: Well, I think anything you see can be helpful, provided that the people who are managing the plants—the owners and supervisors and superintendents and engineers and everybody else—are thinking along somewhat the same line.

If we can't get our people in the operating end of the business to take an active interest in the objective, and have the desire to cut costs—and I am not talking about the boss, because he always wants to cut costs—and they don't use the kind of information we saw on the slides and carry it back to the boss, it will be a long time coming.

R. W. RANSOM: I would like to comment.

To offer ideas of changes that might be made for mechanization and automation in each plant is pretty difficult in a meeting of this kind. It would seem to me that one approach to the problem is in our method of thinking. When we approach problems in the plant we approach them more on the basis of how we are doing them, rather than what we are trying to accomplish as a final result.

If we may become abstract for a moment, shall we



say that we look at the problem or the job that has our attention, and study the results we are trying to get without reference to the methods that are being used, and then try to clear our minds of the prejudices due to past practices, we would probably accomplish a lot more in the way of mechanization, which has to be done before we can automate.

SCOTT: I might make one comment on that, since many times people come to the Midwest Research Institute. Our organization is not necessarily a shining example, but the philosophy of the people involved in our development work is that they usually solve the problems because they don't realize they can't solve them. Most people who are intimately familiar with an operation have their thinking colored by past experience while, in many cases, the developments that have come along make a solution much more feasible than when it was attempted initially.

Therefore, it is very important that when approaching any problem, regardless of what it is, you should break it down into its fundamentals and consider it in a different light.

GILLMAN: We had a meeting of this panel at breakfast. The panel members had a few things on which they differed. Everyone here has certain things he can do in his plant to save money that do not require a lot of investment or expensive engineering. Everyone in our business uses this yardstick: We all know that a man costs us $5,000 a year; that is the figure we use in our calculations. One man at $5,000 a year means that the sales department must sell approximately 150,000 lbs. of product at 3c a pound net profit, or some figure that is well over 100,000 lbs., to get that $5,000 back in a year.

We all know that every person in this room can go through his plant and save the equivalent of one, two, three, four or five men. I don't mean to lay them off; I mean to reduce costs by that much, and then, of course, your profits from your operation will be increased by that much.

Mr. Scott mentioned automation and mechanization. We can do much of this in our plant right now, without spending any money to speak of. There are machines you can buy, and other problems on which you might want to call in experts for advice. I, for one, know that if I have something that is strange to me, I want all the help I can get on it, and I ask for it.

My premise is this: Let's do what we can now. Continue to mechanize and automate as much as we can, as fast as we can. However, it isn't going to be done automatically in any one, two, three or four years; it must be a continuing program for a number of years.

BATCHER: When Mr. Gillman mentioned John MacDougall of the Ford Motor Co., he reminded me of several things that MacDougall said last year concerning mechanization.

When the Ford Motor Company got into this field, just 11 years ago, one of their executive vice presidents coined the word "automation." They were doing at that time what I believe the packing industry is about to do now, or is doing.

I doubt very much whether we will ever see a complete automated plant, that is, a push-button plant



IN FRONT of National Safety Council exhibit are Don MacKenzie of the AMI, Chicago; Richmond W. Unwin, assistant secretary, Reliable Packing Co., Chicago, and John Thurman, Oscar Mayer & Co., Madison, Wisconsin, pictured from left to right. All are active in safety work in the meat packing industry.



CONVENTIONEERS here are enjoying cocktails after a long day of viewing exhibits and attending meetings at party given by Wisconsin Packing Co. of Milwaukee on Saturday, September 27. Group of three seen in right foreground are (from left to right) Roy Anderson, purchasing agent for the company; Floyd A. Segel, who was co-host of the party with his father, Morris, and John Killick, executive secretary of the National Independent Meat Packers Association, with headquarters in Washington, D. C.



HAPPY GROUP above represents Maplecrest Provisions, Inc., of Rochester, N. Y., and Preservaline Manufacturing Co. of Flemington, N. J. From left to right are Chester Waver, vice president of Maplecrest Provisions; Mrs. Rose Waver; Tim Halpin, a salesman for Preservaline, and Mrs. Cyril Murphy. Mrs. Murphy's husband is associated with Maplecrest Provisions, Inc., concern.

with no one around to take care of the various transfer operations.

The Ford Motor Company originally used standard machines that it could buy from various equipment suppliers, and tied them together into mechanized lines and worked to eliminate manual operations in transferring the product from one machine to the other. That is where I think we are now.

If you look at your plant and see men doing this and that, stop and ask yourself the question, "Why do we have a man doing this job? Could we do something with a small device that might cost $100 or even $5,000?"

Gillman's figure of $5,000 may be a little shy for a year's wages these days. It would seem to me that you can afford to take a pretty good look at each of these small jobs that you have been doing. Maybe just closing a door, or opening a door, or transferring an animal or cut from one conveyor to another. Most of those things can be mechanized or automated as a small part of the job.

CHAIRMAN MAURER: Would the members of the panel recommend to the Institute that it develop, or have developed by some engineering service, a possible list of the comparatively simple things that could be brought to the attention of the management of small and medium size companies? Would that be in line with what you have just said?

BATCHER: There are a lot of things we can do. We don't need outside advice. It just seems that we never find enough men or enough time to do something. We should take time.

RANSOM: Perhaps I am thinking of bigger things than have been mentioned just now, but it seems to me that the development of mechanization and automation in the industry could result in more uniform operations throughout the country's plants. Perhaps our problem is a little different from that of the Ford Motor Co. It has one plant to mechanize, and can build its own equipment.

Is it sound for one packer to attempt to develop this machine or that automation system to do the job? Perhaps it is through the Institute that some combined effort could be made to get some of the larger jobs done in the most efficient manner.

In that connection, of course, we can cite some of the rendering and oil-handling installations that have been referred to here today. We know the manufacturers of equipment have done a great deal on them, and not individual packers or operators.



CHAIRMAN and some directors of Meat Industry Supply and Equipment Association after the annual meeting held this year on September 27 at the convention. Standing are Oscar Schmidt (left), The Cincinnati Butchers' Supply Co., Cincinnati, and Harold Scherer, The Allbright-Nell Co., Chicago. Around the table are (from left to right) MISEA chairman Charles W. Hess, Speco, Inc., Schiller Park, Ill.; Virnell Disch of Speco, Inc., and Charles Hawley, Meat Packers Equipment Co., located in Oakland, California.

CHAIRMAN MAURER: Would it be fair to say that we should ask the Institute to recommend people that members of the industry could contact in the event they are thinking about installing new rendering systems so that they can discuss their modernization and automation problems with them?

GILLMAN: I don't think so. I have found that when you turn a job over to someone else it doesn't get done. If you have a problem, there are plenty of people in the United States who can handle problems such as you describe, without calling on the Institute. I believe that in the industry's plants there is sufficient knowledge to do it, if they want to do it, and if they know they can cut costs in that way. I don't think it is a job for the Institute.

RANSOM: I was referring particularly to the cost of the major jobs. I believe our individual companies are discouraged from tackling some problems due to the development costs and the relative economy for a particular company, while the industry as a whole could reap a harvest that would justify the expense.

CHAIRMAN MAURER: I would like to sum it up, if I may, in this fashion, which hasn't particularly come out of the panel discussion:

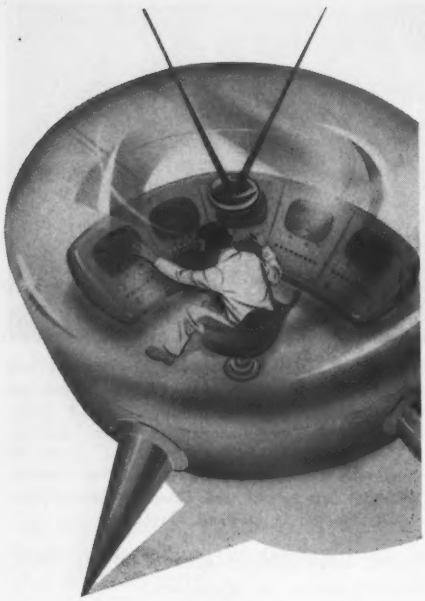
I believe we all agree that some form of automation is here, and is continuing to come, and will continue to come. How it happens, and what makes it happen, probably will be decided differently by different people.

If industry members fail to do their duty as individual firms under the private enterprise system, the sociological and political implications are rather strong that the job can be done in some other fashion. I don't believe we should toss aside lightly the thought that, if we don't do it and do it rather well and quickly, it can be done in some other fashion by cooperatives or government people, or even by individuals who do not now belong to our industry.

I believe that the challenge is thrown at us, regardless of the angle from which you may consider it, and I believe we should accept it and see what we can do about it for the future of the industry as a whole.



TAKING A REST are (from left to right) A. F. Jaumann, Leland Chemical Co., Milwaukee; Henry Hansen, Darling & Co., Chicago; Gilbert Mitchell, Darling & Co., Chicago, and Dan Summer, Packers Laboratory, Inc., of Boston, Massachusetts.



CHANGING PATTERNS

Their Effect on Sausage and Other Processing Operations

F. W. Tauber of Visking Company Leads Off

CHANGING patterns that are occurring within the meat industry is certainly a most timely subject. In the 14 years I have been associated with the meat industry, a large number of desirable changes have occurred. While we sometimes say that change is not always synonymous with progress, we should recognize that no progress is made without change. In making changes we should not operate on a hit or miss basis, but should direct our efforts along systematic lines.

Under such a system, the first step is adequately to identify the existing operations. Then one decides what direction to take after a series of definite tests. Finally, the degree of change is governed by the available raw materials, processing limitations and other factors related to the finished product.

Sausage emulsion and mechanical emulsifiers, my presentation for today, readily illustrate what is meant by directed change. To evaluate properly the usefulness of the mechanical emulsifiers that have been introduced to the trade, one should first examine existing operations in the plant and the finished products, and then establish exactly what the mechanical emulsifier might do for the product, or how it might modify the operations. As an aid or guide in making this decision, let us examine a sausage operation and define or characterize an emulsion prepared in the conventional manner prior to the introduction of the mechanical emulsifiers which have only recently been developed.

Normally, the preparation of a sausage emulsion is composed of two steps: (1) the preparation of a suitable protein solution for coating fat particles, and (2) the mechanical spreading of the coating onto the surface of the fat particles. For example, beef and pork trimmings are ground with plates of appropriate size in a conventional grinder. The ground beef is transferred to the chopper bowl with ice, salt, cure, and spices.



F. W. TAUBER



W. R. GREEN



J. ZILLGITT

This mixture is chopped or comminuted to give a smooth pasty mass for further processing.

Essentially, from the laboratory standpoint, we have thus produced a solution of "myosin," the characteristic protein of muscle. (Myosin is quite soluble in a 5 per cent salt solution, and we have at least this concentration of salt in the chopper at this time.) Usually, in addition to the myosin solution, we have a finely divided suspension of insoluble proteins, such as a collagen and elastin, that are associated with connective and similar meat tissues. From the operational viewpoint we have formed the coating material, and are now ready to use this coating material of soluble protein to coat the fat particles that we produce by the addition of pork trimmings to the chopper.

Utilizing the well-established concepts of emulsion chemistry, the problems of sausage emulsion breakdown can be easily understood. The emulsion breakdown associated with overchopping, with short meat, with overheating, and with too rapid heating in the smokehouse can readily be explained. The observations made by the sausage maker on emulsion breakdown are excellent and almost classical in describing the conditions. We in the laboratory are simply evaluating these observa-

tions with a new reference, namely emulsion chemistry. This evaluation is as follows:

OVERCHOPPING: Overchopping of the emulsion has probably been used as an explanation for emulsion breakdown since the time the first comminuted meat

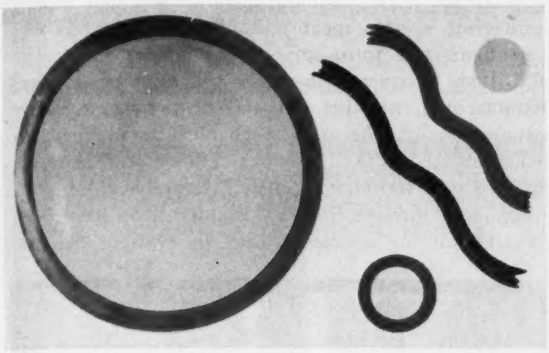


FIGURE 1: Elements of a good emulsion.

mass broke down on processing. The old-time sausage maker, by acute observation, associated the emulsion breakdown with an increase in chopping time. These observations, however, do not explain the mechanism by which the breakdown of the sausage emulsion occurs. The application of emulsion chemistry, however, gives an excellent explanation of all the observed phenomena associated with sausage emulsions. In Figure 1 we see an enlarged schematic view of a sausage emulsion The light stripe represents a muscle fiber containing a large quantity of "myosin," the protein associated with striated muscle or red meat. This protein is readily solubilized by dilute salt solutions such as is produced in sausage emulsions.

The dark stripe represents a connective tissue fiber which is frequently found in shanks, cheeks and tripe. One of the major components of connective tissue is collagen. Collagen is one of the structural materials of animals. Collagen on heating to 145 to 150° F. will shrink to approximately one-third of its dimension and, on continued heating at higher temperatures, collagen is converted into gelatin. Collagen may, under some conditions that are closely associated with sausage emul-

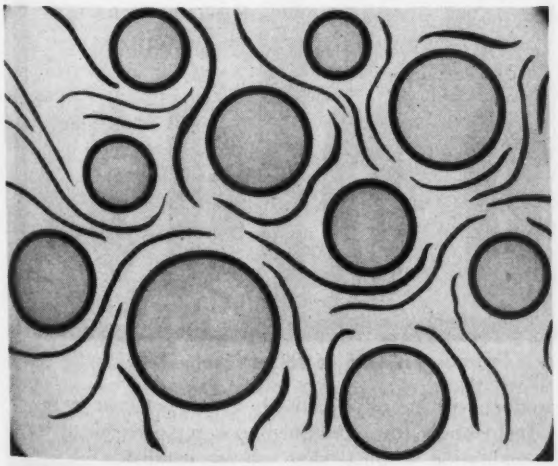


FIGURE 2: Mass of protein-coated fat and fibers.

sion preparation, imbibe considerable amounts of water. This results in good chopper yields. Unfortunately this imbibed water is squeezed out when the emulsions are heated to 145 to 150° F. in the smokehouse.

The smallest circle represents the fat that is added to the sausage emulsion. The source and composition of the fat is important to obtaining good emulsions. Much more work needs to be done in this area.

I have the components identified and now we shall look more closely into the mechanisms. The largest circle with a band represents a globule of fat with a coating of myosin—the salt soluble protein derived from lean red meat. This is the basic unit of the ideal sausage emulsion in which the fat particles are coated with the salt-soluble protein and on subsequent heating in the smokehouse, this protein is coagulated, or sets solid, and holds the fat globules in a rigid web. Each fat particle is entrapped within this protein matrix like honey in a honeycomb.

In Figure 2 we see a good sausage emulsion in which all the fat particles are coated with the soluble protein myosin. Here we have some unswollen myosin fibers, some swollen collagen fibers, and a matrix.

If overchopping occurs, the fat particles become smaller in size and the total surface of the fat particles increases enormously. The protein content of the emulsion which was fixed by the initial formulation may be unable to coat adequately all the fat particles. Any uncoated or partially coated fat particles will simply separate from the emulsion on heating in the smokehouse (see Figure 3) and a fat pocket or fat cap within the sausage mass will result. The increase in surface area of the fat globules as the globule becomes smaller and smaller is one of the most basic ideas in emulsion chemistry. One can conclude that the particle size of the fat is most important in deciding on the protein content of the sausage formulation. Finely chopped emulsions require more soluble protein than do coarsely chopped or ground products. To chop stable sausage emulsions, time, temperature, amounts and nature of the components must be carefully controlled.

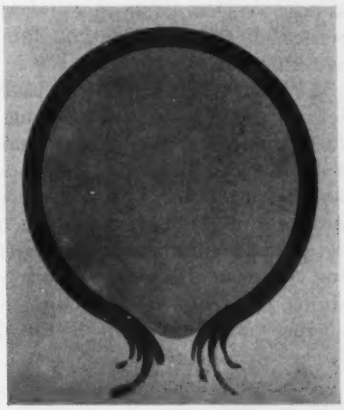
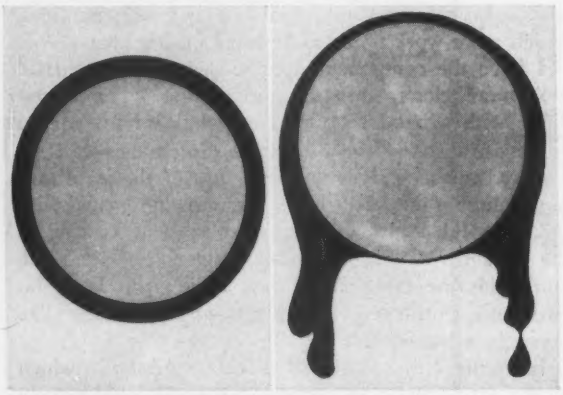


FIGURE 3: The fat pops out.

We shall now consider the type of protein and its relationship to emulsion stability, or the condition that the sausage maker describes as short meat.

THE TYPE OF PROTEIN: The salt-soluble muscle protein, myosin, seems to be the best material found so far to bind water and emulsify and stabilize the fat in a sausage product. Let us now consider what happens when collagen, the component of connective tissue, is used in a sausage emulsion in excessive amounts. Colla-

gen imbibes or binds large quantities of water. The swollen collagen may coat the fat particles (see Figure 4) and seemingly produce a stable emulsion with the fat. However, this is not the case since on heating, the collagen shrinks and squeezes out the fat particles or



FIGURES 4 and 5: Collagen coating flows away.

the collagen is converted into gelatin and drains from the fat particles (see Figure 5), producing an unstable emulsion, whereas myosin under the same conditions sets solid and stabilizes the fat particles within the sausage mass.

EFFECT OF TEMPERATURE: Assuming that the selected formulation and chopping techniques are satisfactory, we may continue to have a problem of fat separation as a result of too rapid a rate of heating, and heating at too high a temperature level. On rapid heating, the protein coating sets solid and entraps the fat particle. The fat particle expands on further heating, whereas the protein coating has a tendency to shrink. Under these conditions, the coagulated protein coating may rupture and the fat will separate or render from the product.

The above described mechanism of sausage emulsion stability is basic for all comminuted meat products. The points to emphasize are as follows:

1. The preparation of a suitable protein coating.
2. The application of this protein coating material to suitably-sized fat particles.
3. The selection of a processing schedule for heating so as to set up the protein framework and stabilize the fat particles.

With the advent of the new mechanical emulsifiers, it is imperative that the sausage maker establish what he wishes to accomplish and how to arrive at those expectations. The mechanical emulsifiers can rapidly disintegrate certain meat and offal products, so that these items will form smooth paste-like masses. The offal items frequently lose their identifying physical characteristics, such as cell and fiber structure, after passing through the new mechanical emulsifiers. In some instances, larger quantities of these offal materials are used in a formulation than is desirable.

Figures 6 through 9 show products that have been prepared in the laboratory with the various contents

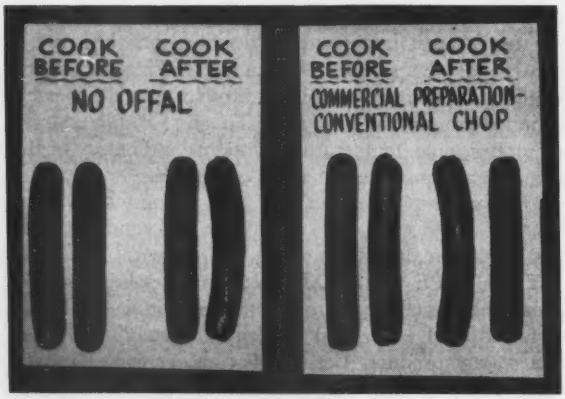


FIGURE 6

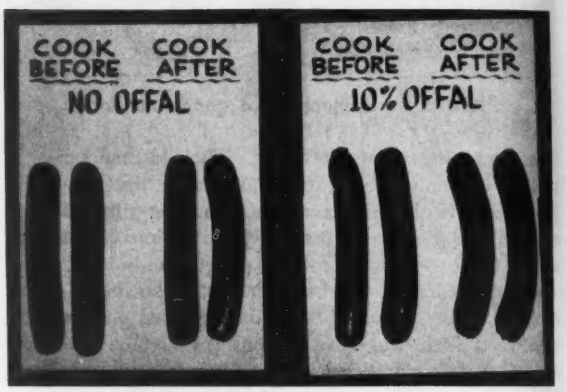


FIGURE 7: 10 per cent offal.

of offal shown. One group of sausage in each figure was made without offal. We show progressively 10 per cent offal, 25 per cent offal, and 50 per cent offal.

The sausage is shown prior to consumer cooking and after cooking. You can see a considerable change in some of these products. We find that it is quite possible to go to 25 per cent offal using a mill and get a reasonably acceptable product for consumer cooking.

With 10 per cent offal (Figure 7) you get about 5 per cent shrink in the consumer cook, whereas the

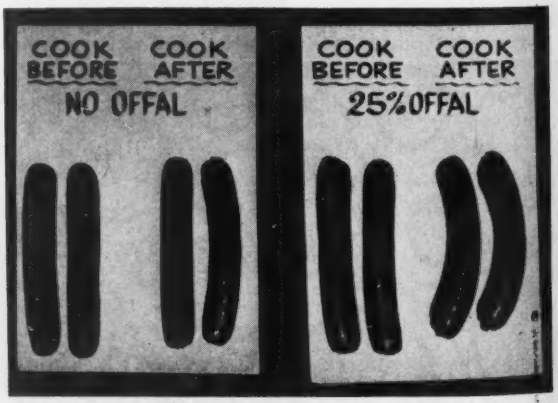


FIGURE 8: 25 per cent offal.

product with no offal gains about 0.5 per cent or so.

Incidentally, the consumer cook is an excellent way of evaluating products that you are making.

The sausage in Figure 8 with 25 per cent offal show

more of a curl and the loss is approximately 6 per cent.

Product with 50 per cent offal is most undesirable (Figure 9). We found that this product with 50 per cent offal was not acceptable in flavor and texture and it lost about 28 per cent of its weight on cooking. The other products at the 10 and 25 per cent levels were as acceptable as products with no offal.

The excessive use of offal material gives emulsions with large quantities of the "collagen" type of protein,

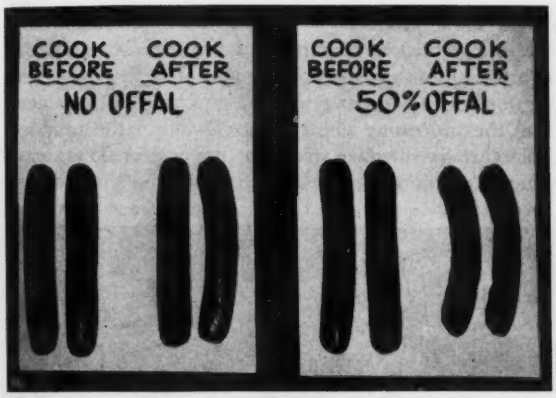


FIGURE 9: 50 per cent offal.

and fatting-out and jelly-formation is aggravated. While in some instances high-offal content products may produce sausage of acceptable retail appearance, the sausage on consumer cooking usually shrink or distort to give a most unattractive appearance.

Therefore, it is important to establish satisfactory working levels for any offal products that are to be incorporated into the sausage emulsion. It is most important to recognize that offal material does not contain the necessary components that are needed adequately to bind water or emulsify fat. There is a possibility that finer disintegration of some of the offal materials may result in a greater binding of water in the raw emulsion. However, this excess water usually seems to separate from the meat mass on processing. Considerable work needs to be done on these materials before a more definite opinion can be given as to the relative value of various offal products and mixtures of offal in the sausage emulsion.

The use of the new mechanical emulsifiers gives very fine-textured sausages. If this type of texture is desired, then certainly these machines should be of interest to the sausage maker. These mechanical emulsifiers also may give good handling conditions in a plant, since they are capable of moving large volumes of emulsion rapidly.

Several satisfactory methods have been developed by the trade for the use of mechanical emulsifiers in conjunction with a conventional chopper. In one instance, the materials are chopped in the conventional manner for several minutes to achieve a good mixture of all the ingredients, and finally the mass is passed through the mechanical emulsifier.

Another method calls for passing offal material through the mechanical emulsifier, and the transfer of weighed portions of the emulsified offal into the chopper. The meat and offal are then chopped together in the conventional manner.

It is desirable, when passing the entire emulsion through the mechanical emulsifier, to check the temperature into and out of the machine. Ten to 15 deg. F. is not an uncommon temperature rise in such machinery and in some instances, greater increases in temperature have occurred.

We can readily state that mechanical emulsifiers have a definite place in the sausage operation. As to specific use in any particular plant's operations, judgment should be made only after adequate testing. This testing should include use of controlled procedures, together with careful and acute observations. Comparative observations on color, flavor, texture and consumer cooking of the new product versus your present product that has good trade acceptance, is a very desirable procedure.

In summary, we urge that you use the following system of testing within your own operation. This system is the principle of directed change. In making your studies, I again emphasize the importance of observing the following conditions:

1. Select good quality meat ingredients.
2. Comminute these meat ingredients using an established or proved controlled process.
3. Observe good sanitary practices throughout the operation.
4. Understand the principles underlying the processing conditions and understand the principles underlying the basic sausage equipment.
5. Obtain good control, preferably through instrumentation.
6. Develop a system for analyzing the products, the processing, and the handling.
7. Use the developed information to advantage in deciding whether the proposed change will give you

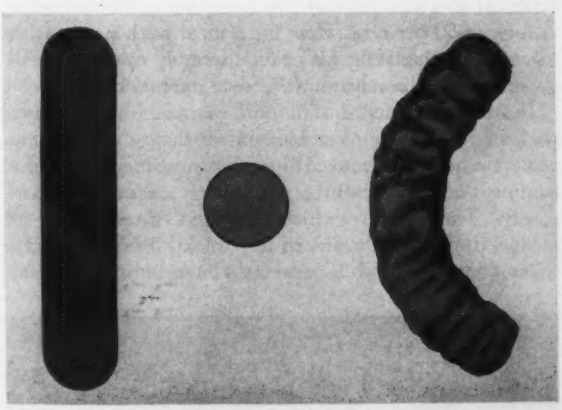


FIGURE 10: Perfect and poor sausage (schematically).

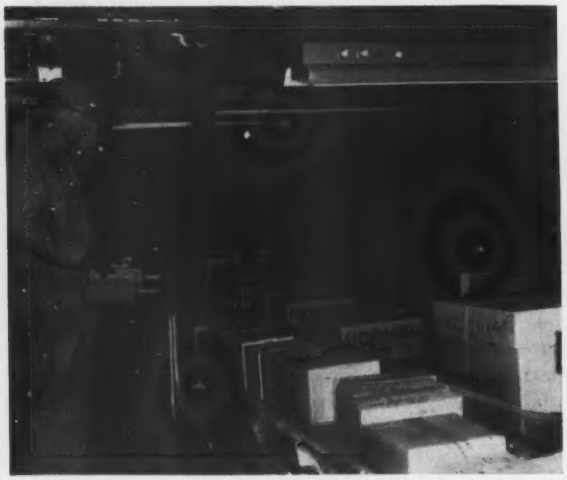
what you hope to achieve, and whether the change is basically an improvement.

Figure 10 sums it all up. If you take care of your operations you can produce a product that, schematically, could be represented by the cylinder. If you don't take care you will undoubtedly end up with something that looks like a wrinkled old bag. I don't think there is any question in your minds about the type of product you want to manufacture and sell.

Promise Streamlining of Order Assembly Job

A resume of a motion picture presented by Walter R. Green of The Rapids-Standard Company, Incorporated.

FLOW racks and mechanical conveyors are equipment pieces that can be used to streamline the order assembly operation. They eliminate much of the non-productive walking and searching the order selector performs in finding the various items needed to fill an order. It is estimated that this non-productive time runs as high as 60 per cent. How far a meat packer may wish to go in mechanizing his order assembly operation will depend upon the nature of his own operation.



HORMEL operator marshalls flow in sequence for storage conveyors.

In the Hormel installation, some 700 different packaged items are assembled in three product holding coolers and then moved in proper sequence to the loading dock where three trucks are loaded simultaneously. The system, which required three years of engineering, uses 10 miles of flow racks, 5 miles of dead roller conveyors and 105 power conveyor sections and moves some products over a distance of 1,600 feet.

It is an excellent example of how order assembly can be broken into stop and go functions. The flow racks are the stop phase and conveyors the go phase. All products from the processing departments arrive in the product coolers where they are stored on the correct flow racks. When the orders are assembled, the products are taken from the racks and placed on the conveyor. Products move past a marshalling center where they are co-ordinated into three storage racks. From the storage racks, they are dispatched via a turntable to any one of 22 railroad or 13 motor truck loading spots.



FLOW RACKS hold the small packaged items for order assembly.

At Sugardale, flow racks are used to store the many small packaged items. The racks are at the front of the order assembly conveyor. The order chasers pull the items needed from these racks and place them on the conveyor or in a shipping container for movement into the delivery truck. The use of flow racks has eliminated the hunting for small items and greatly reduced the space needed to store items in order assembly cooler.



DISPATCHER feeds orders from storage conveyors in sequence.



ORDERS flow past the caller equipped with mike to loading dock.

Control is Key to Efficiency in Processing

Julius A. Zillgitt of Geo. A. Hormel & Co. points out how uncontrolled high-speed processes can run loss-wild.

IN more than one comment from people who assume the responsibility for criticizing and evaluating industry progress, meat packers have been singled out for being behind the times with mechanical improvements and automation. Although we have much to say in defense of ourselves, and in some instances the meat packing industry has actually been the originator and forerunner of manufacturing methods adopted in other industries, still we cannot honestly lay claim to outstanding progress in the way of modern mechanization.

Our industry is an old one. Since the history of early man, human beings have slaughtered animals, hung the carcasses on trees, slashed open the belly, removed the guts, spread the legs with a gambrel stick, cooled the carcass, removed the hide, made sausage and put cuts away in salt and saltpetre, or simply eaten the meat in its fresh state.

There have been some very important, but relatively few important, meat industry improvements. Somebody invented mechanical refrigeration, so after holding out until the last minute we finally tore down the old ice house and dismantled the conveyor that brought the ice up from the river. We refined our packinghouse culture by turning to the anesthesiologist for a method for making the hog comfortable while performing the operation of slaughter.

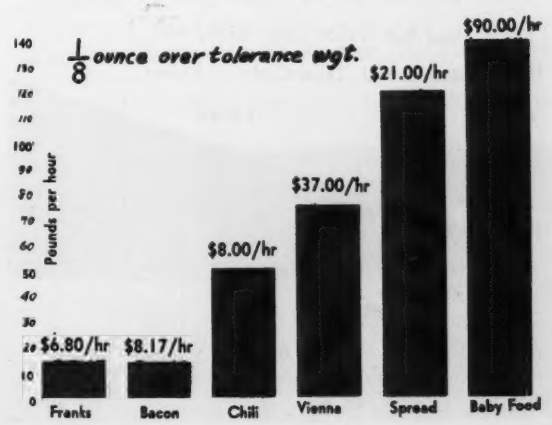
However, in the light of today's technical knowledge, and as compared with some industries, we are slow in getting started. We might try to console ourselves that the margin of profit in our industry is so low that we cannot afford research, mechanical improvements, instrumentation, and the like, but no one should console himself for the error of self-complacency and lazy thinking. As long as farmers raised hogs and cattle, and people wanted pork chops and bologna and beef steak we were satisfied to do the butchering and peddle the product. Things are shaping up differently of late, and we have to reach out for the right kind and quality of animals so that we can process food of the kind and quality the consumer wants.

We can thank our lucky stars for these consumer wants and preferences and these changing eating habits. Under the stimulus of these demands we are forced, if you please, to sit up and take notice, to discard old methods and inbred ideas, to pay attention to quality, to encourage originality and to get a move on with respect to our products and processes.

PAINFUL PROGRESS: The last several years have brought some momentum and product originality to the industry. In our particular case we were fortunate that our company took such a profound and early interest in canning meats, for by so doing we were handed the challenging task of processing products on which there was little background information, and virtually no history. Under such circumstances it was necessary to think and study, try, fail, and work long hours to achieve results. The canning of hams and other sterile and semi-sterile meat products, and the development of processes and controls for these products, were achieved after much failure, and then final success. The development of a sterile luncheon meat such as eventually led to "Spam" was a long experience full of setbacks. Achieving drained weights that increased from 8 to 10-½ to 10-¾ to 11 oz., and finally to a figure approaching the 12 oz. of net packed weight, was the result of full utilization of mechanical, biological, physical, chemical and bacteriological sciences.

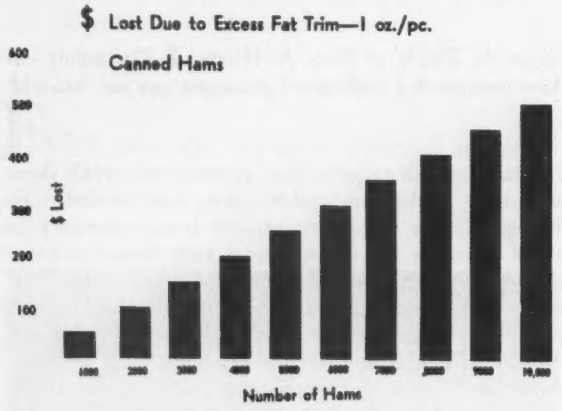
Today some of this seems so obvious that one wonders why we were so long in achieving what is now common knowledge and practice. Even so, we continually remind ourselves not to be too cocky about the obvious lest we wake up some morning to find we have slipped badly. Long before statistical quality control was in vogue it was necessary for us to use the principles of this science to evaluate results. Charts and graphs showing ± deviations in the weights of containers, the net weight of meat in the can, the drained yields after processing, the shrinks in the cooling process, the amount of headspace and vacuum and the physiology of the pack itself were used extensively. Without them we would have had no sure way of objectively evaluating progress and efficiency.

Just as "Spam" production increased from 20 cans a minute to 150 on a single line, and will go eventually to 300, and just as the annual production went from blank thousand units in the year 1933 to as many million in 1958, just so gradually but as surely will many other new products be developed by the industry and



certain old ones be produced at ever-increasing volume and speed.

When that day comes, and it will be here sooner than most of us can imagine, the honeymoon will be over for the processor who has not trained his personnel to

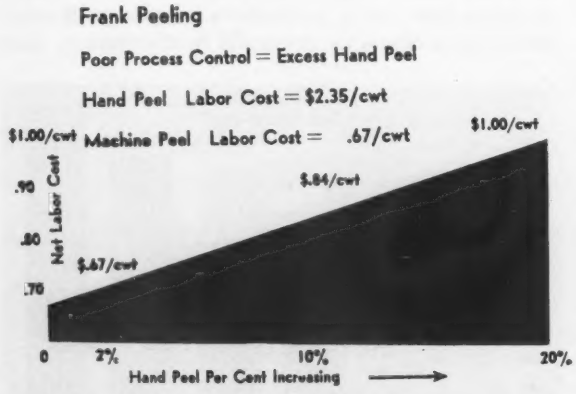


approach the problem of quality control with an entirely new concept and a sound basic program.

Speed and automation presuppose that a quality control system has been worked out and put into effect simultaneously with the new machinery. If it hasn't the line will be running like the front end of a Cadillac with buggy wheels on the rear. And you can't get far with that kind of an outfit. Remember this—the faster the line produces, the faster you can turn out product—and the faster you can lose money.

PERSONAL CONTROL: It is not for me to say what kind of a quality control system you should have. I recently visited a packer whose size of operation is such that ownership control of quality is still the rule. His factory was clean beyond reproach and the quality of his product was uniform. He smelled the spices, bought some of the livestock, watched the slaughtering, sampled the finished products and got around to see his customers and the consumers of his goods. His type of quality control was of the very basic personal kind. We need more of that lost art.

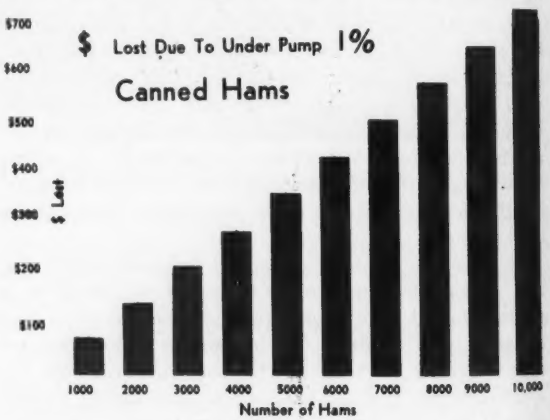
It is no misstatement to say that the larger a corporation becomes, the further management gets away from the little things that made the business successful at its beginning. It is a fact, and I speak from experience, that the faster goods are put out, the more sound and foolproof your system of quality control should become.



A baby food line that operates at 600 jars a minute under a system where the cuts of meat enter at one end, and the processed jars come out the other end already labeled and packed into shipping cartons, needs only one foreman to press a single button that sets things into motion, but it needs technicians to check for cleanliness. It requires chemical analysis including protein content, moisture content, fat content, salt content, fill, net weights, vacuum, bacteriological examination, incubation results, vitamin assay, nutritional values, minerals and the like.

In today's modern factory we are obliged, for the sake of quality and efficiency, to do many of these things right on the production floor instead of taking samples off to the laboratories. *The fast processing line of today has its own simple built-in laboratory to check product constantly and continuously during processing.* For some analyses we have the results before the product has passed from one end of the line to the other, and that isn't very long, as you can imagine.

Instruments that can analyze the product in process may not be accurate to the third decimal place—but for all practical purposes they are close enough. Someone in this audience may question what I mean by "for all practical purposes." Well, to illustrate, suppose you line up ten men in a row on one side of this room and ten blondes on the opposite side. You ask each group



to step forward one-half the distance between them and a center line drawn down the middle of this room. Then you ask them to step forward half the remaining distance, and so on, cutting the distance in half each time. Mathematically they will never come together, but for all practical purposes, they will be close enough.

AUTOMATION: Modern machinery and instrumentation are important aids in controlling quality. Automation in itself is helpful in maintaining quality continuity, particularly when arranged with feed-back devices so that the operator can adjust his formula quickly. If you have selected your equipment wisely, and have set it up under a sound engineering program it will, so far as mechanical things go, provide relative uniformity way beyond that which may be obtained by any other method of product assembly. (And let me add here in the way of advice, that if you have one weak link in a continuous automated production line, get it out, or it will send you to the poor house paying

for delay time, excess labor, bad product, or what is still worse, dissatisfied customers.)

Electronics have been extremely helpful and will prove to be more so. The *electronic bean sorting machine* that automatically picks up each and every bean on the end of a vacuum tube, scans it for color and defects, and flashes impulses on the equivalent of a television screen; and then, with equal speed, makes its decision whether to accept or discard its victim on the basis of a predesigned pattern, is an uncanny device that is sorting carload after carload of beans for us annually, and I repeat, one by one. The *x-ray as a tool for finding foreign materials* in manufactured product is coming into its own, and we can vouch for its practicality in the meat industry. One day it will undoubtedly be used industrially for selecting hams of a given quality standard. This might be accomplished by *a television mechanism which would pick up the x-ray image and compare it with a perfect model,* and if an imperfection or extreme deviation exists the memory device built into the TV unit in synchronization with the x-ray equipment would automatically reject the ham or other product under scrutiny.

The *magnetic trap* with which most of us are very familiar is a useful tool for the control and maintenance of quality in product.

Useful also to our industry to control weight quality is the adoption of the *electronic scale.* In our own Dinty Moore beef stew operation electronic scales are used to weigh the meat in every one of the 200 cans per minute that the line runs. These scales accept or reject each can of product weighed, and those rejected are passed into conveyor lanes as either overweight or underweight where correction is speedily facilitated. Scales of this type are adaptable for a variety of uses in the industry.

OBSERVATION AIDS: Television itself used for observing operations otherwise dangerous to man is a future tool of practicability. It will be used to observe product during irradiation, while smoking, and under intense heat conditions.

We have found the use of the *Beta Densometer* a worthwhile tool for the measurement of the density of product during a continuous flow. This is accomplished by the use of gamma radiation placed on one side of the material to be measured, and a measuring cell located on the other side of the vessel so that it is exposed to the variable radiation field produced by the change in density of the product. The radioactive sources used are Cesium 137 and Cobault 60.



LEANING on huge meat bin displayed by the Manufacturers Cooperative Association, are James Landers (left), Goodyear Aircraft Corp., Akron, O.; Dr. Roy E. Morse, chairman of department of food science, N. J. agricultural experiment station, Rutgers University, and Dr. C. F. Niven, chief of the department of bacteriology of the American Meat Institute Foundation of Chicago.

We should not overlook *genetics* and the breeding and development of animals for our various needs. *Feeding and nutritional work* with animals is a necessary part of any quality control program.

Temperature control is probably one of the most important things to observe in the meat industry, and by this we mean temperature control all the way along the line. It is not sufficient to have the meat well chilled prior to formulation and then lose control of temperatures on the finished product. Greening and sliming, outside of good sanitation practices, are the result of careless temperature controls.

We should not for a moment overlook the necessity for *organoleptic evaluation and consumer taste panels.* Let us not lose sight of the excellent facilities and effective efforts of our own American Meat Institute Foundation organization. Many quality control aids are emanating from this source in the form of circulars which deal with such subjects as:

"Improved Quality The Key To Increased Utilization Of Meat"

"Blending For Uniformity In Meat Meal"

"Discoloration Of Sausage"

"Scientific Evaluation Of Factors Associated With Beef Quality"

TRAINED SUPERVISION: I have outlined some



LEFT: New ideas developed at the convention are discussed by Paul Thompson, vice president and treasurer, The Cudahy Packing Co., Omaha, Neb.; Elmer W. Kneip, E. W. Kneip, Inc., Chicago, and L. F. Long, president, The Cudahy Packing Co. CENTER: Mrs. Dorothy Lovett and Ralph Lovett, president of Lovett Meat Co., Inc., Cincinnati. RIGHT: M. A. Hunt (left), W. A. Kron (center), both of Chicago Cold Storage Division of Beatrice Foods Co., and Martin J. Tullberg, Food Merchandising Magazine, Chicago.

of the tools now in use. Many others are on the way. However, no one of these is worth a tinker's damn unless you have *well trained,* serious-minded, conscientious *management* all the way down the line. If you expect to have this kind of supervision, as everyone would like to have, then you must take time out to train them, encourage them, help them, and be a good example to them yourself. If you and I go around all day without observing, then how in the world can we expect our foremen to see anything?

During one of the summer food technology sessions at M.I.T., a class of 30 of us watched a three-minute motion picture. When it was over we were asked a dozen questions relating to what we were shown in the picture. I think we were average people, but only 20 per cent of the answers were correct. *We hadn't observed.* The picture was dry and dull so we weren't interested and we didn't see. An entirely different film shown found us alerted to the fact that *we were expected to observe,* and this time 97 per cent of the answers were correct.

The trouble with untrained foremen as controllers of quality is that they are poor observers. If they haven't learned how to observe, and if we haven't taught them, then they probably will not react to what is going on in their departments. It's a pretty dull day seeing thousands of slices of shingled bacon coming down the line, but that bacon or that frankfurter or that canned ham ends up on somebody's table where it always undergoes a sound going over from the quality angle.

When William Shakespeare wrote: "The quality of mercy is not strained: it droppeth like the gentle rain from heaven," he wasn't speaking of the housewife who recently wrote us that the ham which she had served her dinner guests was half fat and gristle. There was no mercy in her letter and her emotions were strained.

One thing for sure, today's housewife is not going to stand for a repetition of this sort of thing. She is too businesslike in her dealings with food problems. She digs pretty deep into her purse to pay her meat bill, and she expects to have her money's worth when she leaves the check-out counter. Neither is she reluctant to express her opinion. If she writes to the manufacturer making a complaint, then we have another chance: if she switches to another brand we have not only lost a friend, we have lost some overhead, some selling expense, part of our advertising dollar and our good will in her neighborhood.

It isn't expected or necessary that you go back home and start writing shop orders and purchase requisitions. That would be foolish. But it is advisable to recognize methods and procedures that have been brought up to date. Let me sum up with ten commandments I use:

1. Define your objectives. You must know what you are out to accomplish.

2. Provide your plant management with a clearly written set of product specifications; live with them.

3. Staff your organization with foremen and technicians who have been trained to observe, to recognize both normal and abnormal variations, and then insist on having results.

4. Develop a close relationship and understanding between your sales and production organizations as to quality standards. Establish a sort of permanent feedback of information from the consumer through the sales department to those responsible for production.

5. Look very critically on any operation which requires several movements of the product. Picking up and laying down can be a quality and labor liability.

6. Use automation whenever practicable. If an operation cannot be totally automated, then do it in steps—but do it. It will generally pay off from the standpoint of better quality and lower cost.

7. Make use of the modern measuring and regulating devices available. They will save you time and money.

8. Establish a quality control system. This may be laboratory control, statistical control, personal control or any combination, but have a system.

9. An in-line quality control system is a good goal.

10. Never forget the few important fundamentals of our business—cleanliness, good housekeeping, adequate refrigeration and orderly movement of product.

If these principles are followed they will save costly delays, product loss, excessive claims, unnecessary waste, all of which are realistic influences on cost and quality. Above all else, they will help you keep your most valuable possession—your customers.



REPRESENTATIVES of Maurer-Neuer, Inc., Kansas City, Kan., talk things over. From left to right are C. C. Neuer, executive vice president; P. M. Liggett, secretary; W. A. Conroy (with back to camera), vice president; Fred Cochran, and Perry Martin.



ENTIRE FAMILY attends AMI convention. Shown from left to right are E. J. Roode, president of Roode Packing Co., Fairbury, Neb.; Joe (6); Jackie (9), and Mrs. Lucille Roode.

In Processing Methods Hold Great Promise

Report panelists Heil, Crabb, Jaeke, Eckrich, Tauber, Green and Zillgitt in telling about practical ways to apply pumps, emulsifiers and other devices.


H. JAEKE


G. HEIL


F. CRABB


D. ECKRICH

CHAIRMAN G. L. HEIL: You have heard three interesting discussions on the changing patterns and effect on sausage and other meat plant processing operations.

Now, how are we going to adjust? We have with us, in addition to the three speakers, Frank Crabb, of Stark, Wetzel & Co.; Donald Eckrich, of Peter Eckrich & Sons, and Harold T. Jaeke of Oscar Mayer & Co. organization at Madison.

We feel that these talks have generated some questions in the minds of the audience here today, and our panel of experts is ready, willing and, I think, able to answer any questions that might arise.

In anticipation of the question and answer period we have drawn up a few questions that we think are pertinent to the subject we have had under discussion. For instance, here is one:

"How do currently available food pumps fit into sausage operations?" I would like to ask Mr. Crabb to comment on that.

FRANK CRABB: Food pumps today fit in very well in sausage operations, and there are a number of them in plant use. They are pumping coarse material, fine-ground material and emulsions. Sausage pumps, in general, have been used in many food manufacturing processes, and it seems that possibly we in the meat packing business have been a little slow in picking up some of the advantages our competitors have enjoyed over the past years.

They are pumping such things as peanut butter, salad dressing, potato salad, and, the other day, I heard they were pumping maraschino cherries and guaranteeing not to crush a cherry.

These pumps, as you get them in your sausage department, have to be tailored to your operation. I am not sure that you can go out and get a food pump today and put it in and have it do the job, because it is not quite possible for it to perform that way. However, the many pump manufacturers who are working with sausage people have made a number of changes, and the pumps will fit in.

Mr. Zillgitt mentioned a baby food production line that is a pushbutton operation; that is what sausage processors will have to do to meet a lot of their competition. We have done it, as you know, in a number of departments in our plants, but, for some reason or other, we have slipped a little bit on the one that is very important.

Sausage pumps do fit in, and modern pumps fit in very well in our sausage manufacturing operation.

CHAIRMAN HEIL: Have we reached the ultimate in smokehouse design and efficiency of operation? Mr. Jaeke, will you comment on that?

HAROLD T. JAEKE: I don't believe we have, either in the area of heat or in the area of smoke, relative to either application or control. I think it is particularly true in the area of smoke.

Many improvements will still be made, and it is my feeling that in time the smokehouse, as we know it today, will be a thing of the past, and the results will be obtained in a different way.

PACKER: I have a question concerning the use of pumps. I wonder if the gentlemen would touch on the cautions to be observed in using pumps for sausage emulsion.

CRABB: Depending upon how full your chopper is, and how far you are going to pump the emulsion, and from where to where you are going to pump it, you have to watch the speed. Many people who are pumping emulsions have found that they have had to take the modern pump and slow it down. Some of them have had to open the throat a bit, and others have had to increase the diameter of the pipes. If you pump some emulsions too fast you will find some separation taking place.

CHAIRMAN HEIL: Here is another question: Do conveyorized shipping operations present new problems in maintenance and sanitation? Mr. Zillgitt or Mr. Green, both of you might comment on that.

ZILLGITT: They certainly present no additional problems from the standpoint of sanitation; in fact, I would say the problem has been reduced. That is, certainly implied when we see the product moving in orderly fashion. Of course, in making the setup you must provide the proper refrigeration conditions, and you will move the products in and out regularly, so the sanitation problem is very simple.

From the standpoint of maintenance, of course, the problem is a little different, because under the system we

had our electric trucks needed servicing and repairs. In a conveyor system there are rollers and belts and a few things like that. Actually, our system has not been in service long enough to get a good idea of the whole problem, but I don't think you can say that maintenance is too difficult. From a sanitation standpoint, and particularly refrigeration, there are many, many benefits to be derived.

CHAIRMAN HEIL: Mr. Green, do you have any additional comments?

GREEN: We in the conveyor industry are very happy with new materials being developed for our use. The new process of galvanizing steel on the run, as hot rolled steel is being made, puts a galvanized surface on steel that it was impossible to get a couple of years ago. It gives us a material that is ideal for use in cold rooms.

DuPont and other chemical companies have been doing a great deal of work which is now bearing fruit in the form of successful use of plastics as bearing materials. One of the new materials is Delrin, and we



NON-MEMBERS AND GUESTS registering on the first morning.

feel that this is a substance that will replace steel balls in bearing work and will overcome many of the breakdown problems we have had due to dampness.

As to the problem of sanitation, the greatest problem facing us is that no two departments of health agree



50-YEAR service badge is presented to Harold Swift (center), honorary chairman of the board of Swift & Company, Chicago, by Homer Davison, president of the American Meat Institute. John Holmes, board chairman of Swift, watches Davison pin on badge.

on what sanitation is. If we had a standard set of rules across the country it would give us a good guide to develop more suitable equipment for sanitary use.

CHAIRMAN HEIL: I can heartily agree with you on that last item. Every time you get a new batch of inspectors the rules are changed.

Are there any questions or comments on this particular subject? We should like audience participation.

PACKER: I would like to ask the gentleman who spoke on pumping sausage material what can be done to make sure that air is kept out of the material. Can a vacuum attachment be placed on the pump?

CRABB: I am not sure whether a vacuum attachment could be used or not, but there are some pumps on the market today that are quite free of any air entrainment. That is one of the things that has to be watched; some of the pulsating pumps seem to let in air. Some of the other kinds of pumps, such as rotary, screw and other types, don't seem to be bothered with air quite as much.

If you do get air in, then you have a problem at the outlet end. You should stress that point with whoever you deal with on pumps, because air can cause you a lot of trouble.

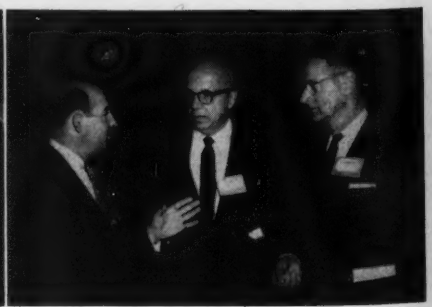
PACKER: I would like to ask if there is a distinct advantage in using ice or flake ice in these high-speed machines, or ice water.

TAUBER: It looks as though I am elected on this one. Actually, the experience we have had is that cold water works very well in applications of this sort. Our experience with these mechanical emulsifiers has been

LEFT: Al Davies (left), assistant to president of AMI, is stressing his point as he talks with Congressman Ralph Hardey of Indiana (center) and J. R. Jones, Geo. A. Hormel & Co., Austin, Minn. CENTER: George Pattison (left), manager, Canada Packers, Ltd., New York City, with John Krauss, sr., president of John Krauss, Inc., Jamaica, N.Y. RIGHT: D. J. Schachter (left), vice president, Hygrade Food Products Corp., Detroit; J. L. Olson (center), director, Geo. A. Hormel & Co., Austin, and H. J. Kruse, vice president and general manager, Seattle Packing Co., Seattle, Wash.









LEFT: Erect and smiling are C. T. Holbrook, general manager, Reelfoot Packing Co., Union City, Tenn.; P. D. Bartholomew, sales representative, The Griffith Laboratories, Inc., Chicago, and Willard King, plant superintendent, also of Reelfoot Packing Co. CENTER: Pleasant-looking couple is Mrs. Alice Bort and Myron Bort, Bort Packing, Canfield, Ohio. RIGHT: Robert S. Clemens, sales promotion and Ezra S. Clemens, secretary, both of Hatfield Packing Co., Hatfield, Pa., and Mike Shea, plant manager, Weiland Packing Co., Inc., located in Phoenixville, Pennsylvania.

that you should chill the ingredients. My personal preference, based on our experience, is that you should comminute the material with a small amount of ice water and then use this pasty material to add to the conventional chopper; thus you minimize the dulling of knives from chunks of ice, etc.

PACKER: With modern temperature controls, food chemistry and in-plant packaging, is smoking absolutely essential as a packinghouse operation?

JAEKE: I am inclined to think that it has become less and less essential. Of course, whether it can be eliminated completely is something that remains to be seen. Of course, if it is eliminated, then the same effect will be obtained in other ways.

PACKER: Would you say, then, that artificial coloring is another device that is gradually fading out of the picture?

JAEKE: Yes, I think that is generally true.

CHAIRMAN HEIL: Here is a question on which we have certainly had trouble in our plant, and I am sure a lot of the others have had the same difficulty: What steps might be taken to enable people working in shipping coolers to tolerate lower temperatures? Mr. Crabb, how about that?

CRABB: Of course, there are a lot of different materials on the market that your employes can wear. We have some people in our plant that almost wear them as underwear. Some of them wear these garments under frocks and in many different ways. The material is a quilted one and the advantage is this—that the men used to roll themselves up in a lot of cumbersome clothes and couldn't work quite so fast. However, this new lightweight material has changed their attitude and they work a little better.

We have also found that this clothing allows the people more freedom in their movements, and we do not have quite the problem of employes wanting to take an extra rest period to warm up. Therefore, this type of clothing seems to be the answer.

The same material fits inside the hard safety hat and the people seem to be using such insulated hats much more willingly and like them better.

PACKER: I would like to ask Mr. Crabb whether the clothing he mentioned is issued or approved?

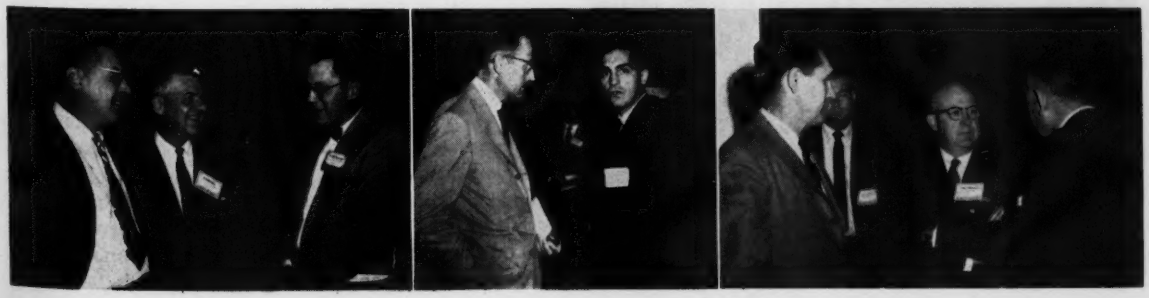
CRABB: In our case the clothing is not furnished by our company. We give them the regular clothing allowance and, of course, in connection with the cooler, our rate also covers working in such places.

PACKER: I would like to know what the disadvantage is in using an emulsifier as compared with the cutters?

TAUBER: That is a rather difficult question to answer in a short period, but the advantage depends on the type of texture you desire and how rapidly you want to achieve this texture. Our own opinion here is that the emulsifier has a place in the industry but that it should to be used with caution.

CHAIRMAN HEIL: What is the minimum tonnage

LEFT: All smiles are these three conventioneers. They are George Stark, president, Stark, Wetzel & Co., Inc., Indianapolis; A. W. Brickman, president, Illinois Meat Co., Chicago, and Dr. B. S. Schweigert, AMIF, Chicago. CENTER: Seemingly caught off-guard are Jim Baker (left), president of Baker/Johnson & Dickinson (ad agency handling Stark, Wetzel & Co. account), Milwaukee, Wis., and Joe Buscemie, vice president in charge of beef division, Stark, Wetzel & Co., Inc., Indianapolis. RIGHT: A group of three after the morning session on Friday, September 26. They are (left to right) Dr. Robert C. Kramer, argicultural economist and coordinator, Michigan marketing program, Michigan State University; Edwin H. McCormick, president, S. R. Gerber Sausage Co., Inc., Buffalo, N. Y., and C. G. Randell (back to camera), USDA, Washington, D. C.



required that would justify the expenditure for emulsifying machinery?

TAUBER: I really don't know about that.

PACKER: How often should samples be made or be taken from a production line running from 25 to 30 packages a minute, and would it be desirable for the foreman to take the samples?

ZILLGITT: It depends entirely on the size of the system. I would say that your foreman could sample, and that he ought to be supplied with some type of form to make a record for the system. I would also think you would check the findings each 30 minutes to an hour, depending upon the nature of the product.

CHAIRMAN HEIL: Here is a question that I think is of interest to a lot of packers: In the light of the tremendous amount of beef imported from outside the country, what are some of the problems involved in the use of imported salted or cured trimmings, and also frozen trimmings from Australia and New Zealand?

ECKRICH: In using the South American meat you must operate under the supervision of MID. You can buy this material either as 4 per cent salted, plain, without curing, or 4 per cent salted with sodium nitrate added. The government is very cautious in supervising your use of this material from the time it enters your door until it is put in your product and comes out of the cookers. They check 10 per cent of this material for bone fragments, cleanliness and general condition. Of course, after that is done, your next important step is keeping the material under adequate refrigeration. I believe that the suppliers are recommending that it be held from 26 to 30° F.

In using this material you should remember that it is cured and will not do what fresh meat will do.

The government does require that this material must be heated to specific internal temperatures. You are told to steam out the containers in which the material arrives, and there are requirements as to the disposition of the material left over from the grinder plates, etc.

PACKER: With regard to emulsifiers, I wonder whether, with regard to using ice or ice water, you should eliminate the cutter?

ECKRICH: We have had experience in that area but not in my plant. I understand that the cutter is still used to a degree, and we also use ice and water.



RELAXATION AND CONVERSATION are enjoyed by Ralph C. Zalken (back to camera) Industrial Foods, Inc., Peabody, Mass.; Dr. E. Auerbach (center) AMIF, Chicago, and Dr. Roy E. Morse, New Jersey Experimental Station, Rutgers University, New Brunswick.



DISCUSSION in grand ballroom following the afternoon session on Friday, September 26, shows Don MacKenzie (back to camera) of the AMI, and (from left to right) Bob Brobst, L. T. Force and Jack Ruddell, all of Canada Packers, Ltd., Toronto, Canada.

CHAIRMAN HEIL: Here is one: Is it feasible to use dry ice in sausage operations?

TAUBER: We have had some limited experience at the laboratory level and it indicates that the material has a very definite place, and we hope to achieve certain results from its use. In the case of pork sausage, there seems to be improvement in color. We find that when around 3 to 5 lbs. of dry ice is employed per hundredweight in canned, chopped meats, there seems to be some advantage.

PACKER: Would the use of a pump increase the bacteria count in sausage?

CRABB: The use of a pump would not increase bacterial content of sausage if all of the equipment were clean and sanitary. You still have the same sanitary problems. As far as the heating is concerned, that is one of the things that you must watch. You may also have to change the size of the pump to eliminate as much friction as possible. Of course, all of this depends, to a large extent, on the size of your operation.

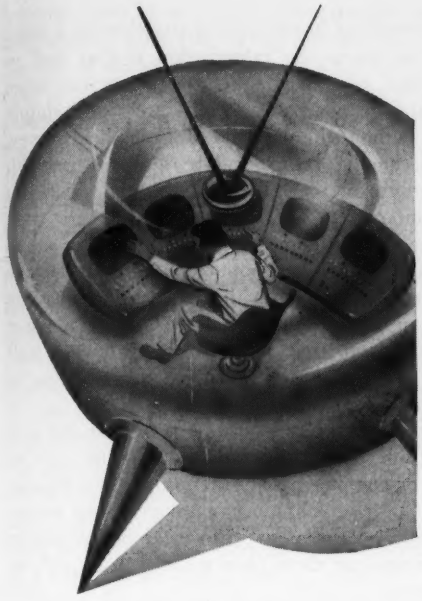
PACKER: In the use of dry ice for fresh pork sausage is all of the CO_2 dissipated or is the residue or any bad taste left?

TAUBER: Our experience is that the gas dissipates fairly rapidly, and we have not had any difficulty with flavor or anything of that sort.

CHAIRMAN HEIL: I would like to sum up the discussion this morning in very few words.

All three speakers emphasized the point that we must have sound management if this industry is going to attain a more profitable basis. Second, we must be careful in buying the equipment that we know we want, and the methods we use in placing this equipment in our plants. All three speakers emphasized quality; we must have quality in our business if we are going to give the housewife the kind of products she wants, and we must have efficiency in our operations to be able to price our products so that Mrs. Housewife will want to buy them.

If we do the kind of job that this industry is capable of doing, then I believe that our small margin of profit can be expanded to the point where we can go out and buy some of the wonderful, modern and necessary equipment that this industry needs.



CHANGING PATTERNS

Their Effect on Meat Sales and Distribution

S. G. Barton of Market Research Leads Off



S. BARTON



J. KIELTY



A. C. NIELSEN

FOR the past 20 years, the work of our company has centered around the study of the consumer. This past year has been a milestone in food consumption research, marked by the completion of the most comprehensive study of the present and future of food preparation, serving and consumption ever undertaken.

Our company has recently completed the recording of a census of food consumption of some 13,000 persons. This research, which is known as The National Menu Census, was underwritten by a small group of progressive food manufacturers and packers.

The detailed records of some 4,500,000 dish-servings have been carefully analyzed and transferred to several million punch cards and also to many reels of magnetic tape. These are to feed into the huge memory system of the IBM 704, our largest commercial electronic computer. The data are also compatible with the still larger and faster 709 which will be in operation early next year.

This Menu Census is the first of a series of such studies, designed accurately to measure both the practices and characteristics of the changing consumer and to serve as a source library for the planning and stimulation of ideas on new food products. The major contribution which this Menu Census has already made is that of modifying and, in many cases, sharply changing imperfect or completely erroneous assumptions which many people have held about the existing food practices of people in this country.

KITCHEN MEALS: To some people it was no surprise when we learned that 70 per cent of the home meals were served in the kitchen. To many others, however, including architectural leaders, as well as advertising and sales promotion executives, the wide-spread prevalence of eating in the kitchen was a complete surprise. I can tell you that during the summer quarter—July, August, September—71 per cent of the U. S. home meals at which meat is served in any form are consumed in the kitchen, and, in fact, 67 per cent of those meals where beef is served as the main dish are consumed in the kitchen.

In an effort to explain this figure, you or your neighbor might assume that this is peculiar of summer months, or you might assume that I have used too loose a definition of the kitchen, or too broad, perhaps, a definition of a meal. Such questions can be quickly resolved.

It seems to me that most often indecision or negation of a proposed new marketing or merchandising idea or tactic in your own company is caused by the disagreement of two or more responsible people with respect to some first premise. Such disagreements, when probed, can usually be traced to an underlying disagreement in assumptions about consumer practice or preferences.

A further contribution of the Menu Census is that with thanks to a break-through in electronic computer systems it will shortly be possible for you to ask any sequence or combination of questions and to receive the answers to these questions within a few days or even a few short hours' time.

This computer systems break-through allows us to



LEATHER DIDN'T HIDE at the convention. TOP: Ben and Fred Levin, Sugardale Provision, show interest in leather accessories created by Florence Hunting, interior decorator. CENTER: Leather exhibit of the Beaux Arts Studio, Chicago. BOTTOM: Edward Izzen, Wilson & Co. general foreman, Omaha, trying on leather apron designed by Mrs. Frances Pollack, Reliable Belt Co.

think of the census of home-feeding practices as a huge library with access to the information so fast and so economical that you may raise your questions from day to day and get your answers in direct and simple form, usually without the necessity of a new field survey, nor even the chore of digesting a thousand research tables in a search for the bit of information which you need at the moment.

Indeed, the huge random access of computer-stored data will make it more economical to permit anyone in your organization to obtain the answer to a question or to check an assumption before proceeding along a path of investigation, than it would be to have a staff meeting for the purpose of resolving the question at hand by sheer argument.

Most broad-scale or multi-purpose surveys in the past have failed from an informational standpoint—not on the precision or completeness of the sample, nor because of the field survey techniques employed, but rather through inability of the analytical machinery to extract from the research just those facts which you require for specific decision.

Thus it is now finally clear that with present day computers and high speed printers, we could easily become over-supplied with figures and statistics. Something had to be done to avoid national statistical indigestion of a fatal variety.

We in research have finally realized that our goal in serving you must still be that of maximizing the value of research findings, but we must minimize the bulk or quantity of redundant, immaterial, or entirely unrelated data with respect to the problem you must solve at the moment.

This goal is now realistic because it is possible for us to delegate to the computer the detailed work of reviewing a mass of statistics with instruction to print out for your study just the few limited statistics found to be most pertinent to your problem. For example, very shortly you can ask such a generalized question as "What foods are substituted by persons present at the meal who refuse pork chops when they are served as the main family dish?"

In specifying the form of your answer, you could ask the computer to give only general, summarized information on those substitute dishes which contained no meat, or to give you a page of some more detailed information on those substitute dishes which utilized veal, as an example, in some form.

PERSONAL CHARACTERISTICS: As another example, you could ask the Menu Census to describe the characteristics of people who occassionally eat beef for breakfast. Bear in mind that there are many thousands of ways in which these people can be described. The scope of the research is such that persons eating or refusing a certain kind of dish can be described in terms of their physical characteristics, their concern with respect to weight or diet, the demands of their occupation or recreation, their customary food selection patterns at home or away from home, their allergies or their taste preferences with respect to seasonings, etc.

Thus, you many delegate to the computer the job of reviewing many thousands of possible characteristics with the instruction to provide you answers, however,

for only those 10 or 20 key characteristics, whether they be simple or complex. Thus, we see the beginning of the end of the white-collar man's burden: rapid reduction in the amount of paper work which you must peruse to do your job or to keep apace with the changing and heretofore unpredictable consumer.

It may be of interest for you to know that according to the Menu Census, again during the summer quarter, a meat entree is served in some form on an average of once a day by U. S. families. The incidence runs slightly higher on week-days—Monday through Thursday, than for any other day of the week. Meat is served most often at the evening meal, closely followed by the morning meal, with noon servings representing about 25 per cent of the occasions. When we look at beef, however, though the pattern is similar by days of the week, only a very small proportion of servings of beef appear at the morning meal. To some marketing planners, this may be viewed as a great opportunity for development, since it is also true that there are but few servings of meat in combination with other food items in the form of a casserole dish or a pie.

During the summer quarter it seemed curious, at least to me, that meat in some form or other was served more often at meals other than the main meal of the day and this, of course, was particularly true for pork and processed meat. The reverse is true for beef. Beef by all odds has its greatest popularity in the main meal of the day. In 78 per cent of the main meals, meat in some form (not including poultry or fish) was evidently the main dish and this reminds us of the suggestion of one New England housewife that the supermarket be arranged so that she could select her main course first on entering the store, thereby better selecting the side dishes once this part was settled. This may or may not be a good idea, but it is worthy of a test.

A second function of the Menu Census is now seen to be that of providing documentation or rationale for the food packer or processor who wishes to obtain the cooperation of the retailer in the proper display of related items. Here for the first time is information which retailers lack as to the real patterns of menus being assembled by the U. S. consumer.

If we remember that as a rule the retailer knows nothing about his customers and has no means of seeing how they divide their buying between his store and others, you can appreciate the service which your salesman can perform in helping the distributor fully to understand the meal-serving patterns of the consumer as they exist today and as they will change in the future.



STOPPING to chat and look over programs are (left to right) L. T. Force, general superintendent, Canada Packers Ltd., Toronto, Ontario, Canada; R. W. Andrew, plant manager, William Davies Co., Danville, Ill.; Cornelius C. Noble, president, Noble's Independent Meat Co. of Madera, California, and A. W. Brickman, president of the Illinois Meat Co. of Chicago.

CHANGING CONSUMER: I promised to discuss the changing consumer, and I can imagine that you probably have some questions of immediate concern, and perhaps some of a longer term nature that I might help you to answer. Let us assume that your first question is "How can we sell meat and meat products more profitably?" I think the general answer to this rather general question is that you must better adapt to existing consumer practices and preferences which have indeed changed rapidly during even the past five years.

At the present time, the morning meal is the one which is most prevalent and most consistently served among all families. It is also the meal attended by the most people. Since without a doubt the proportion of meals consumed in institutions or away from home will greatly increase at a phenomenal rate, I have no doubt that the relative importance of the morning meal at home will greatly increase.

Secondly, informal meals which we call "snacks" have already increased to the point where I expect that they will represent a more important market for you than the noon meal in the very near future. Our census shows meat as a commodity having a deficient share of the morning meal and snacks market. Another opportunity is that of carried lunches. Thus, a way to sell meat more profitably may well lie in the development of meat products better adapted to the morning meal, plus snacks to be eaten at home and to the carried lunch which is prepared at home and then taken to business or school. These meals are important now and will rapidly become more important in the future.

A second way of selling meat more profitably now



THE CRYSTAL ROOM of the Palmer House bulged with VIPs of the meat industry when the AMI board of directors and a few invited guests assembled to sip and crunch at luncheon. Wesley Hardenbergh, retired AMI president and third from end in second row of seats, was presented with a plaque. Homer Davison, president, and George Lewis, vice president, are at extreme rear centered under chandeliers.

is to develop end products which recognize the present consumer needs for convenience in shopping and convenience in preparation. This is related to the high proportion of housewives who are commercially employed and the forecast that this group will rapidly increase both in absolute number and proportion of total market.



LEATHER EVENING GOWN, modeled by Mary Gale Gettinger, had its first showing at the convention. The dress is made of cloud-white Delwan leather with a flowing fishtail back and lined in Burgundy red satin. The seams are outlined in pearls. The dress, of course, is cut in the latest Paris fashion. Designed by Miriam Lippincott, styles advisor to Carson, Pirie, Scott & Co., the gown is a brainstorm-product of an informal "prestige-in-leather" team made up of employes of the American Meat Institute, executives of Armour Leather, and Eugene Stadel of Illinois Agricultural Association.

The third suggestion is that you develop end products which are better adapted to the wide-spread situation and growing trend toward individual selection and individual meal hours for the individual members of a family or household. I would say that the single most important consumer change from your standpoint is the growing trend toward heterogeneity in individual selection and the decline of the more formalized family meal, which in all probability has been the mainstay of fresh meat as the main course or central item in the past. This would seem to argue for some concentrated effort and even haste in the development of end meat products, both in simple form and in combination with other foods, if you are to increase your profit margins.

The Menu Census shows over two-thirds of the morning meals are prepared in less than 30 minutes' time and a very substantial part in less than 15 minutes. Even when we exclude snacks or informal meals, we find about one-half of all meals prepared in the home take less than 30 minutes. In adapting to changing consumer preferences, you might also keep in mind the preference for less cleanup time. Already we find over 20 per cent of the meals cleaned up in less than 15 minutes (if they are cleaned up at all), and about 60 per cent of the meals are cleaned up in less than 30 minutes' time. I see the patterns of demand for meat products changing very rapidly in just the next few years and feel that your companies must now adopt a policy of marketing end products in order to increase your margins. Otherwise, you must retreat to the position of a supplier to other manufacturers who will more and more be the effective competitors in meeting the consumer demand for convenience, for individual selection and for nutrition, regardless of the amount or type of meat used in the end dish.

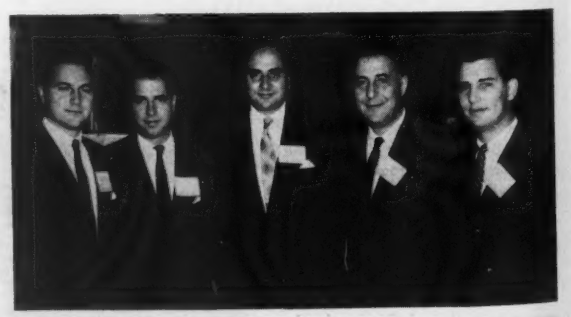
LEVEL OF THE BUYER: An important social trend from your point of view is that of the very rapidly changing education level of the buyer. This historically has meant more demand for meat products. You must consider, however, that more and more will the consumer base her selection on an educated experience. This is not only through formal education, but experience through eating outside the home: in school, in the armed forces, and because of more travel.

The consumer will put more reliance on the authority of the pediatrician, of public health authorities, and the better educated advice of parents and friends. I believe, then, that both the consumer and the retailer more and more will be impressed only by the facts of the particular case you present.

Accordingly, I view the successful salesman as one equipped with documented survey and performance data for presentation to chain buying groups. Though it may be a long time before the packer salesman is selected solely for his ability to present research data, certainly distributor buying practices will be less and less governed by whim, friendship or prejudice and more and more based upon a full understanding of the consumer's total buying practice and preference.

The proof that a new product or a new promotion is, in fact, a contribution to the economy must be demonstrated from a total marketing point of view, i.e., of benefit not only to the manufacturer, but to the retailer and to the consumer as well.

Your second question could well be: Will there be an increasing demand for food in the near and mid-term future? Be assured that there will. In fact, the aggregate demand for food in this country will increase



TWO FAMILIES representing Hygrade Food Products Corp., of Detroit, Mich., (from left to right) A. J. Ross, M. H. Ross, assistant vice president; Edward J. Slotkin, executive vice president; Hugo Slotkin, president, and Donald Slotkin are shown at the convention.

at an explosive rate, based upon most conservative estimates of new family formation, and based upon the distribution of age of the population already born.

The demand for a food is not expected, however, to grow completely apace with the population increase. This is because the greatest population increase will come among children and among older people whose



CONVENTIONEERS looking at AMI natural casings exhibit in the lobby of the grand ballroom, put on this year by Wilson & Co., Inc.

physical demands for food are below those of people in the numerically more stable younger-middle age brackets. In the very near future, we visualize many of two extreme types of families—the very young parents with several children, with both parents employed.

In these families, children and perhaps in-laws will exercise a greater role in the purchasing, selection, and preparation of meals. The family type at the other extreme is the one or two-person older family, completely or partly retired. For both these groups, we can expect a growing reliance upon the facilities of public and semi-public feeding establishments.

It would then seem only logical to conclude that two distribution systems will have growing importance:

a) An almost fully automatic system of home food ordering with a great part of the foods coming to the home via direct home delivery based on fully automated in-store order assembly;

b) Growth of the institutional feeding establishment as the purveyor of the end-dishes which provide the variation in the meal pattern or which supply the complete meal for finishing and consumption at home. You might well soon find yourself selecting the main course of the dessert for your evening home meal in the company cafeteria when you select your noon luncheon.

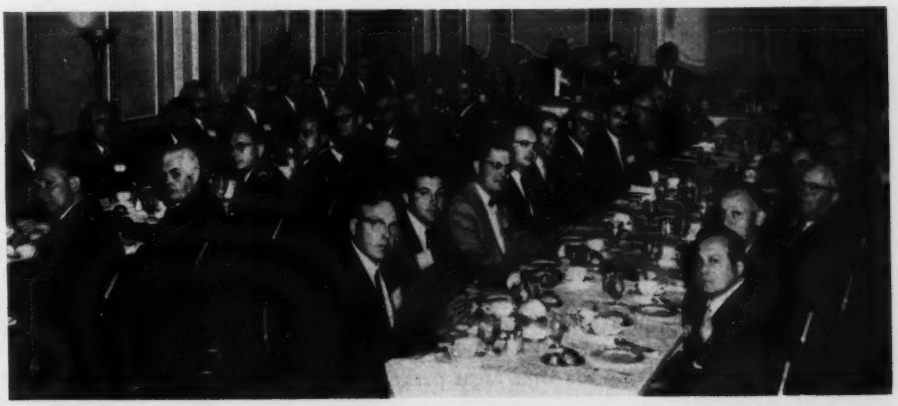
TYPES OF FAMILIES: Viewing the changing consumer in another way, we again can imagine two types of families which exist widely today and will likely grow rapidly in relative importance. At one extreme is the family for whom convenience is everything. This group includes the person who dislikes cooking and housekeeping per se, the person who for physiological or psychological reasons dislikes food preparation, and the person who simply would prefer to engage in commercial or gainful employment. On this axis, the other type of extreme family may be cooking hobbyists.

As you plan new meat products, research can now tell you not only the manner in which meals are presently assembled in the home, but the manner in which end dishes are modified or combined at the table by individual family members. Thus you may be able to satisfy these apparently diverse markets, perhaps with a single but adaptable product form.

While clearly U. S. policies on world trade and our policies for immigration could greatly modify or completely upset any conclusion we offer here, I would like to suggest again that the changing consumer market will be shaped by two factors which are over-riding and which, furthermore, are inter-active. First is technological development, including prepackaged cuts of meat, prepackaged meals and individual dishes, equipment for the almost instant preparation of foods, and dispensing machines for the storage and handling of foods and beverages in individual portions, both for on-premise and off-premise or home consumption.

The second over-riding trend is the social trend toward individuality. This embraces broadening individual experience in foods, more education on nutrition values and appeal, a greater permissiveness to children, and an overall strengthening of individual judgment.

In closing, I would like to paraphrase the thoughtful comment of Prof. Jacob Getzels, who was a member of the brilliant inter-disciplinary group which guided the National Menu Census into being. He sees as emerging a present-time orientation, a change perhaps from a traditional ethic of self-denial to an ethic of individual interest. The recent book entitled—"The Quest for Identity," may well describe your marketing planning to grow apace with the changing consumer.



LUNCHEON for the American Meat Institute's hard-working beef committee was held on Friday, September 26 in the Crystal room of the Palmer House.

In the Retail Distribution of Meat Products

As surveyed by analyst A. C. Nielsen, jr., president of the A. C. Nielsen research organization.

WE ARE here today to consider present and future problems and opportunities of the meat packing industry. It is fitting that such deliberations should take place here in the City of Chicago. This city in the 1870's was a sprawling, unattractive place, with little to recommend it except a plentiful supply of cattle which came in from the western plains.

Men of great vision saw in that fact an opportunity through which, by hard, honest work, they soon made Chicago the undisputed meat packing center of a hungry, growing country.

SCIENTIFIC METHODS: Applying the scientific method to all phases of meat operations, tremendous technical advances have been made in the quality of meat, the cost of its production, and its universal availability to a point unmatched anywhere else in the world.

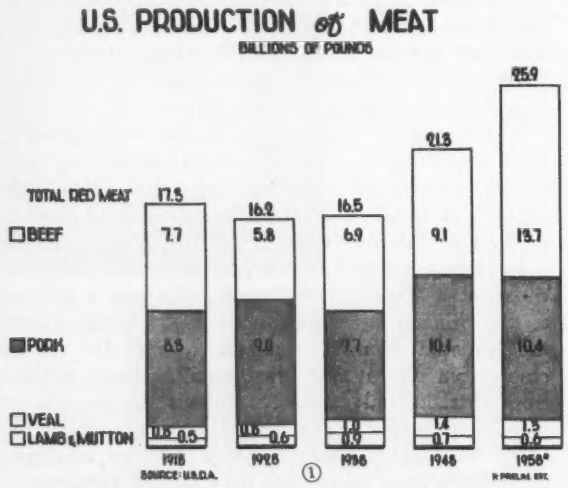


CHART 1: Dramatic increase in meat output.

Not only has the meat itself been made tastier, cheaper, and easier to obtain, but costs have been held down through improved technology and the ingenious development of countless, useful by-products.

These advances have played a great part in permitting the dramatic increase in meat production achieved in the last 4 decades, as shown in Chart 1. Production of meat this year will be 50 per cent greater than in 1918, with beef showing the greatest growth.

Having come this far this fast, it might be contended that you can now relax. On the contrary, there are indications that you will have to work harder than ever to maintain the strong position you have built up. That problems are occurring for some meat packers, at least, is suggested by the following facts. I would like to have you note:

1. Some recent profit and loss statements have been relatively unsatisfactory, and

2. Many new competitive factors are appearing on the horizon—some of which, such as the encroachment by retail customers themselves into both the processing and storage areas, are proving extremely difficult for the packer to cope with.

PRESUMPTUOUSNESS: Being a statistician and not a meat packer, you may wonder at my presumptuousness in commenting on your problems. I am encouraged to do so because our entire corporate life of 35 years has been devoted to solving problems in marketing. I hope that this experience may permit us to clarify current developments and bring them into sharper focus for you this morning. For all of you, these developments pose problems—for some of you they represent opportunities, depending upon the actions your respective managements may take.

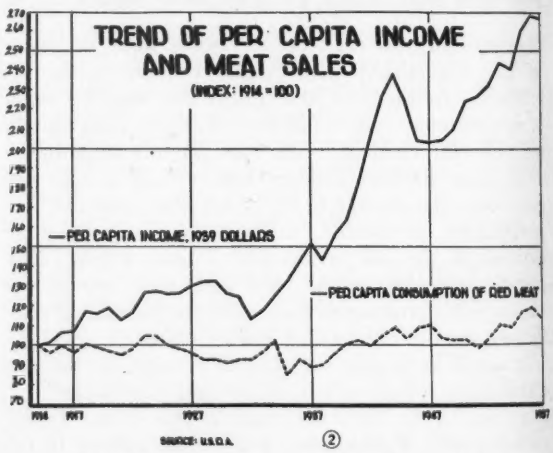


CHART 2: Per capita income and meat sales.

Here we see the long-term per capita sales trend for meat compared with the trend of per capita real income, as shown in Chart 2. The effect of inflation has been taken out. Note that there has been no worthwhile overall buildup in red meat consumption despite increased average ability to buy. This means that the American is now consuming about the same amount of meat per person as in the early 1920's, despite the fact that his ability to buy has more than doubled. This point seems basic for the industry.

Furthermore, for virtually every one of the past 10 years we see a smaller share of the consumers' income

being spent for meat, as shown in Chart 3. Meat's share has dropped from 6.6 per cent in 1948 to 5 per cent in 1957. Some of the recent loss may be attributed to the development of new lines of merchandise. The supermarket has in all probability introduced more new items in recent years than any other type of retail outlet.

From a usage standpoint, some of these products qualify as direct substitutes for the products you sell; others satisfy new uses. In either event, you are directly affected since they:

1. Take shelf and display space from established products, and
2. Divert retailer and consumer dollars and attention.

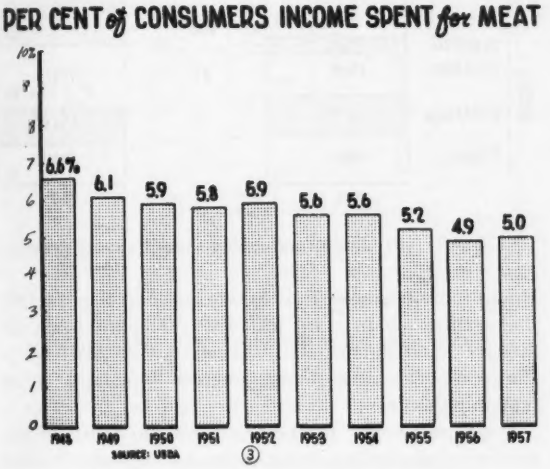


CHART 3: Less income is spent for meat.

Some of these items, such as fish and poultry, are, of course, normally handled in the meat department.

Here we see very sharp increase in the per capita consumption of poultry, for example, as shown in Chart 4. Viewing the meat department as a whole we see that it accounts for about one-fourth of total store sales, being somewhat more important to independent stores than to chains—and that its share of total store dollar sales has held steady these past four years. This is

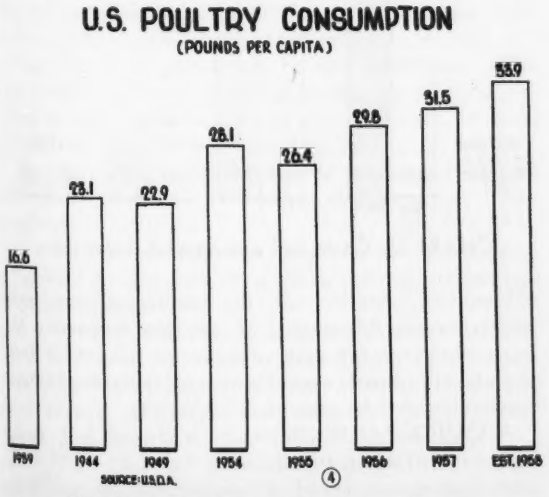


CHART 4: Poultry makes some real gains.

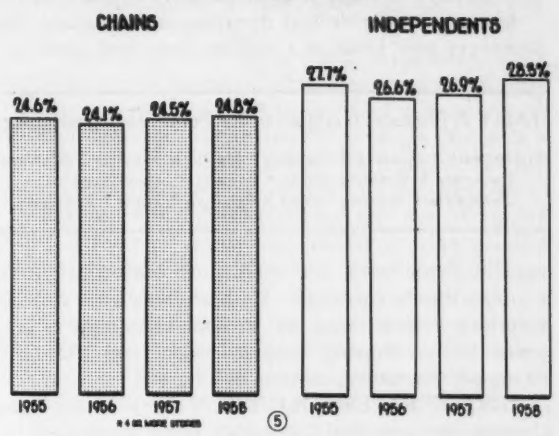


CHART 5: Meat is largest store department.

revealed in Chart 5. The meat department is not only the largest single department in a grocery store, but it also contributes to both the highest ratio of dollar sales per square foot and profit margin per square foot.

THE PEAK: Some may feel that we have reached the peak of meat sales per capita—that we can't expect to sell any more except as population increases. This may be true, but consider for a moment what has been accomplishment elsewhere. We see that among others,

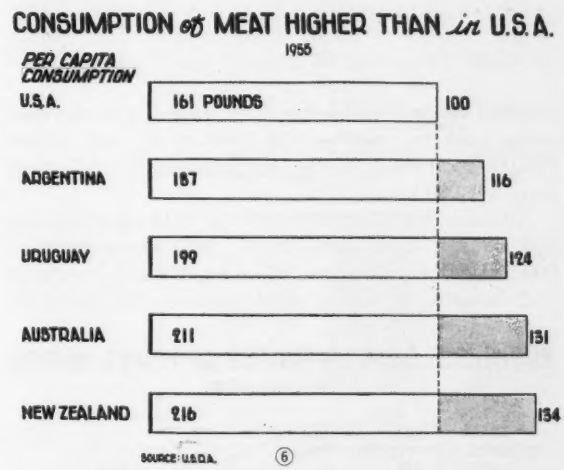


CHART 6: U. S. is fifth in this race.

these four countries, as shown in Chart 6, all consume more meat per capita than we do. Could we but achieve levels already reached in Australia or New Zealand, our meat industry would be fully one-third larger.

When we see the amount of meat consumed per person each day in this country we appreciate that in total, it nets down to but 6⅔ oz. a day. This is equivalent to but 2½ little pork sausage links, one hamburger—and scarcely a mouthful of veal and lamb. The opportunity to increase this usage of meat has never been better—incomes being at an all-time high. However, we must not overlook the many new items competing for

a share of Father's much sought after take-home pay.

Here is but a partial list of the new non-food lines now handled by many large stores, as shown in Chart 7. I think you will agree that diversion of time, space, and money to new items is a reality. New food items are

TABLE 7: Products Competing for Food Store Shelf Space

Kitchenware • Household Supplies • Electrical Supplies • Glassware
Stationery & Greeting Cards • Records • School Supplies
Dinnerware • Sporting Goods • Furniture • Seeds • Fertilizers

equally diversionary, and even more competitive from a usage standpoint. Some of these items are showing surprising growth rates; and in some cases such as prepared frozen dinners, chicken, turkey and fish have strong representation, as seen in Chart 8.

REVIEW SALES POLICIES: Other startling changes are occurring also which make it desirable to review (and perhaps modify) existing sales and distribution policies, as shown in Chart 9. Of major concern to you is the continuing trend toward concentration of

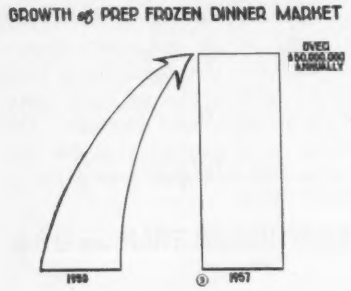


CHART 8: Market for prepared frozen dinners grows fast in seven years.

grocery business in the hands of fewer, and therefore more powerful, retailers. In 1948 there were almost 408,000 food stores in the United States. By 1957 there were 343,000 stores.

All stores did $26,000,000,000 in 1948; $44,000,000,000 in 1957. Thus, some 65,000 fewer stores did $18,000,000,000 more business. More importantly, the chains and independent supers which formerly accounted for

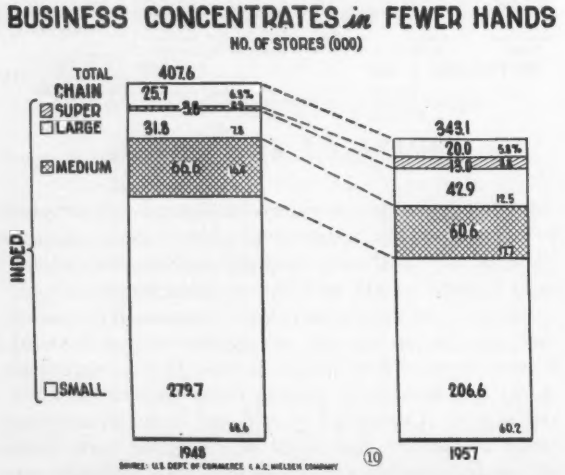


CHART 9: Food business now in fewer hands.

only 43.7 per cent of the total volume in 1948, have grown steadily to over 64 per cent in 1957. Large stores have forged ahead at a surprising rate and are now indi-

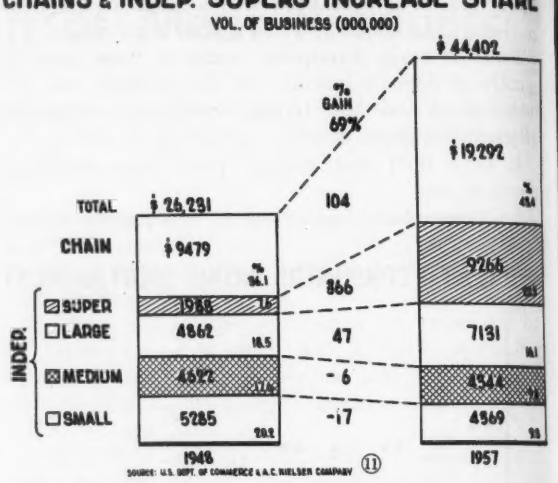


CHART 10: Chains and independent supers grow.

vidually big businesses, as shown in Chart 11. In 1957 the average chain store did $940,000 total sales; the average super independent did nearly $750,000; this as compared with only minor progress in volume for all remaining stores.

Your continuous need is to have the right pricing, delivery and merchandising schedules increase in direct proportion to business concentration. In addition to keeping these factors constantly in tune with the new tempo

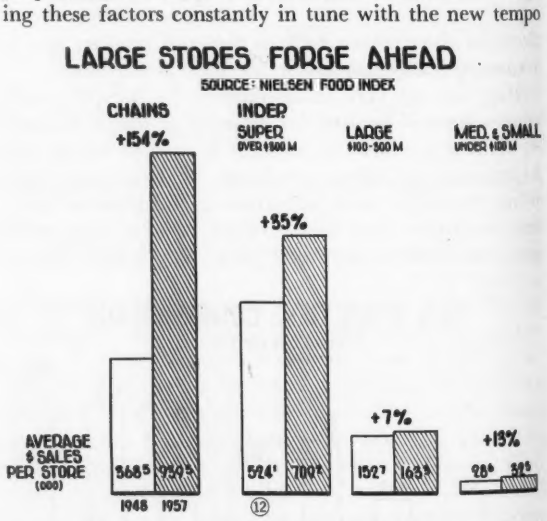


CHART 11: Chain and supermarket dollar sales.

of business, consider also the quality of your sales representatives. The caliber of men now buying for the large retailers is first-class. Because of this, every food manufacturer should consider ways of upgrading his own representatives who must deal with them.

A QUICK LOOK: So much for a quick look at the food merchandising picture as it exists today. In the years immediately ahead, I should think you might be optimistic concerning the demand for meat. Our pop-

ulation growth in recent years has been truly surprising. It has traced to increased longevity and births per family but principally to the increased marriage rate in the 1940's. And the children of those marriages are now, or soon will be, marrying and having children of their own. Thus, we have a compounding chain-reaction effect which is just now beginning to be felt. The tremendous gain of 17,000,000 which occurred in our

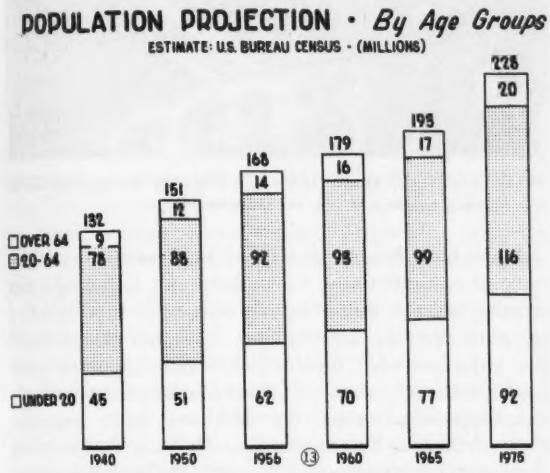


CHART 12: Age groups in U. S. population.

national population from 1950 through 1956, as shown in Chart 12, will almost certainly be exceeded by the gain which is expected to occur in the next six years.

The Census Bureau estimates that by 1960 population will exceed 1956 levels by nearly 12,000,000 persons—a total which exceeds the combined present population of the six New England states. Someone will have to produce the meat for these people; so the opportunity seems real. Profits will go to those who recognize and solve best the demand and distribution problems confronting the industry.

One such problem is to conform your sales policies and practices to the shifting pattern of distribution. That retailers feel more might be done along this line is suggested by replies to a few inquiries we have just made in order to get a "Retailer's Eye View" of your industry. We did not make a comprehensive survey, but just made a few random calls—and frankly we got an earful!

Some of these points may be well-taken; others you may consider to be ill-founded or exaggerated. But for what it may be worth, I'd like to report a few of them to you for your serious consideration:

Retailers consider packers to be very hard to deal with as differentiated from sellers of other grocery commodities.

a.) One major objection seems to be the inability to obtain a firm price on a given quantity of product on the first call.

b.) Another time-waster from the retailer's point of view is that no one man in some packer organizations can quote firm prices on all types of meat. They must, for example, deal with a separate man on beef, veal, lamb, pork, etc.

c.) Retailers also reported difficulties in obtaining adequate supplies for special promotion purposes. For example, they may wish to take an ad and promote the sale of chuck. The sale of chuck then goes way up, but the packer wants to sell the whole carcass, so in order to get enough chuck to support the sale they have to buy too much of everything else.

d.) Some apparently resent efforts of packers to place their own grades on meat rather than to accept government grades which permit more exact comparisons to be made between various packers' offerings. Not only is the relationship between packer and retailer changing, but also that between the retailer and the shopper.

SELF-SERVICE STORES: In the past 8 to 10 years, self-service stores have grown at a tremendous rate, as you will see in Chart 13. They now do 82 per cent of the grocery business. The stores are giant in size and impersonal. Complete or partial self-service meat departments are reported by over 9 out of 10 members of Super Market Institute. No longer does the housewife ask a manager or clerk what is good for dinner, or how to prepare such and such a product. No one, except a stock boy or a check-out girl, is in evidence. You must do much of your selling to the consumer *before* she goes into the store.

Quality becomes more important as the shopper passes by the meat case. Surveys which we have made over the years invariably indicate that consistently good quality meat is a major reason why a woman selects a particular grocery store. Incomes have continued to advance, offering an opportunity to trade families up, not only to better cuts, but to better quality throughout. In recent years more than half of all beef sold has been graded "U. S. Choice," but as you men know better than anyone, there is a wide difference in the eating quality even within grades. Better breeding, feeding, and handling of the product throughout all phases of

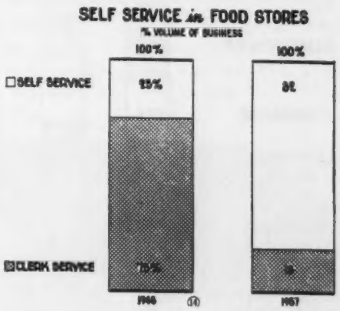


CHART 13: Self-service stores now do 82 per cent of the total grocery business.

the operation will materially benefit the industry through achieving greater consumer satisfaction in the final eating of meat and meat dishes.

The growing importance of self-selection in the sale of meat combined with increased competition from other products, both food and non-food, would indicate the need for a stepped-up, industry-wide promotional campaign, intensifying and broadening your previous efforts to change people's eating habits to include more meat.

I am sure you are aware of the large campaigns being conducted by the Tea Bureau, the Pan American Coffee Bureau, the California Fruit Growers' Exchange, the Florida Citrus Commission, the Cling Peach Association, the American Dairy Association and others. I am not ignoring your own work along these lines, but reemphasizing its importance and suggesting that this

type of activity has become even more vital to your industry than ever before. If, for example, just 1/20th of a cent or half a mill per pound were collected from the industry, a very impressive advertising campaign could be launched. The total sum would exceed the appropriation of most other associations bent on similiar yet competitive objectives.

To provide such a sum—even allowing for the difference between carcass weight and the weight of retail cuts—the price of meat at retail would have to be increased about ¾ of a mill per pound—an infinitesimal amount in the eyes of the consumer.

DOLLARS WORKING HARDER: In considering advertising, two points stand out: More money is being spent and each dollar is working harder, due to better media, better media selection, and better copy. Media research has made substantial contributions to manufacturers' knowledge in this area during the past few years. Your own advertising programs, to be competitive, must not only be increased proportionately, but be made more efficient as well.

In 1957, for example, the level of major media outlay (excluding spot TV) by 20 of the largest grocery-item sellers in the country was 34 per cent above 1953, as shown in Chart 14. If your own individual advertising programs lagged, and all the evidence I have been able

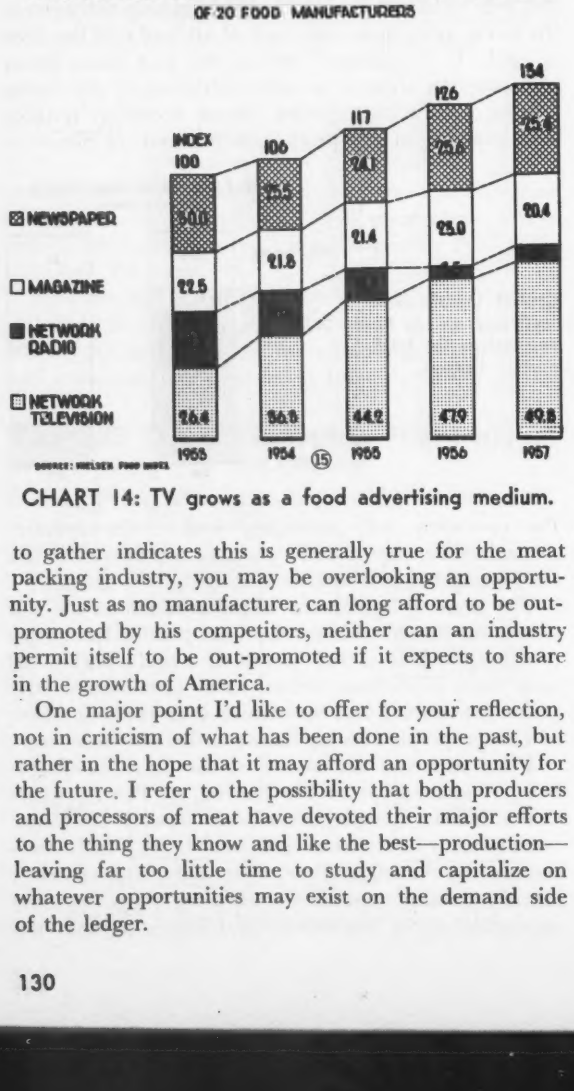
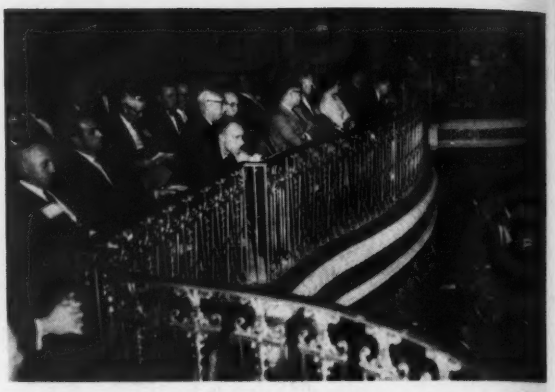


CHART 14: TV grows as a food advertising medium.

to gather indicates this is generally true for the meat packing industry, you may be overlooking an opportunity. Just as no manufacturer can long afford to be out-promoted by his competitors, neither can an industry permit itself to be out-promoted if it expects to share in the growth of America.

One major point I'd like to offer for your reflection, not in criticism of what has been done in the past, but rather in the hope that it may afford an opportunity for the future. I refer to the possibility that both producers and processors of meat have devoted their major efforts to the thing they know and like the best—production—leaving far too little time to study and capitalize on whatever opportunities may exist on the demand side of the ledger.



BALCONY, as well as main floor, was filled for the popular Saturday morning sausage session on September 27.

Many have become convinced that production is the same as consumption—that whatever is raised will determine what is sold. The old adage, "Sell it or smell it," runs deep in our thinking. Price has thus become the major economic force which is relied upon to move production and to see that supply balances demand. As a consequence, we see repeated, year after year, the sharp cyclical swings in profit which have characterized this great industry—swings in which the packer hopes to keep his head above water in the poor years, in order to capitalize on the good years.

TODAY'S CONDITIONS: While this procedure made fortunes for some in the past, it seems ill-suited to today's conditions. For one thing, the vastly increased tax rates, both corporate and individual, siphon off too large a proportion of the money earned in the good years, giving inadequate carry-over privileges for poor years. As a consequence, many in the industry are not earning, over a period of time, an adequate return on their working capital, long-term debt, and shareholder equity in the business.

Anyone engaged in agricultural production and processing, whether it be in tree fruits, row crops, or meat, is continuously plagued by the fact that year-end profit or loss statements are not determined alone by pounds produced per head of cattle, or unit cost of processing that production, but rather by the ratio of supply to demand. Invariably increased production, without corresponding increase in demand, will create a market glut of product.

If this is true, and all experience suggests that it is, then each producing group, whether it be meat packers, cattlemen, swine producers, or others, to realize maximum efficiency and return, must in their own interest devote equal time and attention to each side of the balance—to marketing as well as production. On the marketing side, price has, in my judgment, been too heavily relied upon as the motivating force in the meat packing industry.

We often talk in such big figures that we lose sight of the fact that our business success is determined by millions of little decisions. In 1957, the average per capita expenditure for all items bought in grocery stores was 70c a day—and it's important to each of you to try and get more of that 70c. Always remember, everything offered for sale competes with your products—not only

items sold in grocery stores, but other goods and services as well. Over 6,000 items are now being sold by a typical supermarket, and even this figure is increasing by about 200 items per year.

CONSUMER DECISIONS: The sum total of all the little consumer decisions about these thousands of items offered for sale in the stores adds up to what we call "marketing knowledge at the retail level." We have seen that sales of meat have grown throughout the years, that they will in all probability continue to grow with increasing population. But increased sales have not necessarily brought increased profits. Why? I believe because too little knowledge exists on consumer demand. This is the missing link.

The weight in tons of animals slaughtered is not necessarily a true measure of consumer demand. For example, do you know how much meat was sold over the retail counter during the last two months, and how this amount compared with what was sold during the same period a year ago?

Were prices more or less favorable in relation to costs? Such figures form the basis of decisions regarding the true levels of consumer demand. If producers and processors were continuously in touch with these developments, which inevitably determine long-term prices, perhaps both groups could operate with greater efficiency and profit. Such, in any event, has been our experience in serving other industries where long, forward planning of agricultural production is required. These people, whose problems, though perhaps less complex, are not unlike your own, have found it profitable to come together at appropriate times throughout the year in formal meetings involving leaders in the various producer and processor groups, and to have at their disposal three basic tools, which are:

a.) Reliable audited retail sales records showing, for example, consumer sales of various types, grades, and kinds of products by all significant geographic areas.

b.) An industry-wide promotional budget varying in size from year to year—but adequate in impact to insure a level of demand slightly in excess of available supply.

c.) An effective means of broadly disseminating current production and retail consumption data, which may tend through closer balancing of demand and supply relationships to widen profit margins for all.

The system is admittedly not perfect as actual supply will always differ from planned production, due to weather, if for no other reason. In addition, short-term demand can only be stimulated within narrow limits by advertising and promotion. Nevertheless, the results have been rewarding enough, so that few who have participated in such a program would wish to return to the old method where price plays so large, and at times, so devastating a role.

BETTER PROFIT CONTROL: In addition to attempting in this way to bring your industry under better profit control, I would like to suggest that you spend as much time and money as possible in the year immediately ahead in the development of really new products. Finally, I would suggest that you study your pricing policies even more critically than you have at any time in the past.

Based on available current knowledge, it would appear that farm prices, packinghouse labor, freight rates,



THREE-WAY discussion on "Changing Patterns and Effect on Livestock Production and Procurement" at the morning session on Friday, September 26. At the table (from left to right) are Dr. Herrell DeGraff, Babcock professor of economics, school of nutrition, Cornell University; Homer R. Davison, president of AMI, and Dr. Robert C. Kramer, agricultural economist and coordinator, Michigan marketing program, Michigan State University. All seemed to be enjoying their stay on the speakers' platform.



SOUTHERN NONCHALANCE is displayed by this group from Peerless Packing Co., Beckley, W. Va. Shown from left to right are Mrs. James Gallaher; James Gallaher, sausage foreman; Mrs. L. P. Sorensen, wife of company president, and Mrs. Buckley.



PANEL on "How Do We Adjust?" at the morning session on Saturday, September 27. At the table (from left to right) are Frank Crabb, vice president-director, Stark, Wetzel & Co., Inc., Indianapolis; Donald Eckrich, Peter Eckrich & Sons, Inc., Fort Wayne, Ind.; Walter R. Green, product sales manager, The Rapids-Standard Co., Inc., Grand Rapids, Mich.; Julius A. Zillgitt, manager, research and development division, Geo. A. Hormel & Co., Austin, Minn.; Harold T. Jaeke, Oscar Mayer & Co., and George L. Heil, jr., president, Heil Packing Co., St. Louis, Mo. F. Warren Tauber, manager, food and packaging research department, technical division, Visking Co., division of Union Carbide Corp., Chicago, is seen at the rostrum.

and other essentials in the aggregate, are going to continue to exert upward pressures on your costs. At the same time buyers, who individually are getting larger, will be doing the job they get paid for—namely, exerting all possible downward pressure on your delivered prices. As a result, a continued squeeze on your margins seems to be the inevitable result.

Short-term, you can meet the situation in lots of ways—by not pricing to reflect the replacement cost of your facilities, for example, by scaling back selling and merchandising effort; by failure to invest in new product development or in studies aimed at learning more about how to sell, or not presenting forcefully your products to retailers and consumers. When orders are slow and obligations heavy, there is a tremendous temptation to take one of these ways out.

However, all signs point to the increasing need for efficient modern plants; for the relocation of some slaughtering plants closer to shifting cattle production and feed lot centers; for reduction or closing up of certain branch houses in order to take advantage of warehousing facilities of chains and wholesalers desiring direct shipment; for attractive new branded products with better packaging and labels; for vigorous promotional support; and for more up-to-date factual data, if an individual packer, or the great meat packing industry in total, is going to hold to or expand its established position in the market place.

Under such circumstances of keen competition, many packers fear to price so as to recover their costs and provide a surplus for future needs. I say to you: Forget these fears. No product was ever over-priced unless it was under-desired. The figures we have seen today prove that the need and want for your products is great and will grow. You can sell plenty. But you must know in each year just how much you can sell profitably. To earn satisfactory profits consistently, production must be geared more closely than in the past to effective consumer demand.

VARIATIONS: Because there are so many producers and packers, and further because of the inevitable variations in weather and available feed conditions, balancing supply and demand is most difficult to accomplish. New and better forms of group action will be essential if supply and demand are to be brought into closer agreement, as it is evident that both improved livestock production methods and increased packing plant productivity have caused supply capabilities for the present to out-distance demand. Perhaps a broadening of your various group activities along the lines suggested earlier would be a wise investment in these highly competitive times.

Industry-wide action in some form seems particularly desirable now to promote the sale of each type of meat in order that demand may be kept in closer balance with supply potentials. Remember that every food product must compete with every other; for this reason, consumers must continuously be made to want your product over others.

Next, the packer must encourage his sales representatives not to sell first with price. As we suggested, a large number of the retailer's own customers trade with him because they believe he offers consistently high quality meat. Equip your salesmen with consistent uniformly high quality meat products having a high turnover, and an efficient delivery organization, so that they can sell first with quality and service. Let the competitor worry about price.



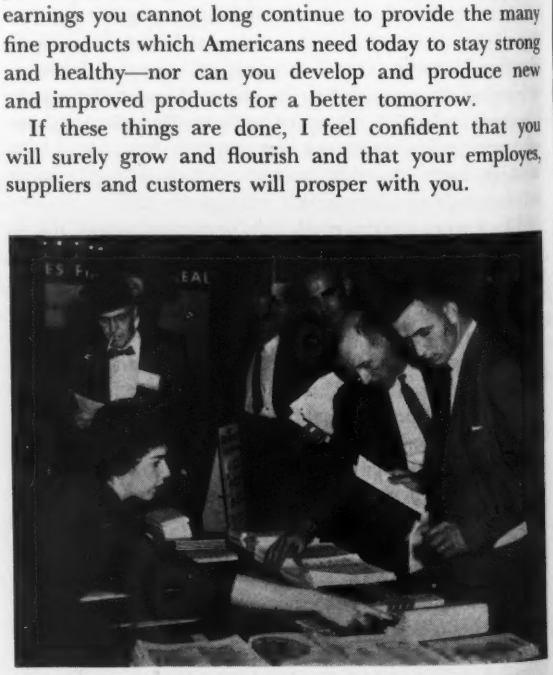
GAY ATMOSPHERE surrounds conventioneers at cocktail party given by Baker Johnson and Dickinson of Milwaukee on Friday evening, September 26. Seen in right foreground of picture are (from left to right) John Krauss, jr., John Krauss, Inc., Jamaica, N.Y.; Marilyn Slauson, Baker Johnson & Dickinson; John Krauss, sr., president, John Krauss, Inc., and Beverly Rempe, a staff member of the Milwaukee advertising concern.

I predict that as retailers become better informed through the use of high-speed accounting equipment and other forms of record-keeping, they will be looking more for dependable delivery, consistent quality, and items of fast turnover from which they can earn a profit on limited shelf space.

In all of this, work the retail trade with increased diligence and adjust grievances promptly, for, as we have said, each call and each account are now more important to you than ever before.

Finally, don't be afraid to set prices which return you a fair but not exorbitant profit. Without adequate earnings you cannot long continue to provide the many fine products which Americans need today to stay strong and healthy—nor can you develop and produce new and improved products for a better tomorrow.

If these things are done, I feel confident that you will surely grow and flourish and that your employes, suppliers and customers will prosper with you.



INFORMATION BOOTH is kept busy as conventioneers arrive on Friday, September 26, the opening day of the convention.

Quality of Salesmanship Must Be Improved

Comments John Kielty of Poetzinger, Dechert & Kielty after study of meat salesmen and industry selling.

WHEN I measure the meat packer salesmen with whom I worked out in the field last year against the demands of this new world of marketing and food distribution, I'm forced to conclude with Rastus—"We is in trouble!" I hasten to point out that my purpose here today is not to condemn, but rather to explain the premise on which I base this conclusion, and then to describe what might be done to correct the situation.

Mr. Barton and Mr. Neilsen based their conclusions on observable facts that you can measure, evaluate, and interpret. They got their facts from the source—Mr. Barton from the homes and Mr. Neilsen from the retail stores. Well, our little company has been particularly fortunate in this regard; we've had an opportunity to make a national study of your salesmen and sales managers. We made a field check as a part of the sales training assignment you gave us almost two years ago.

We visited 12 cities across the country from Boston to Los Angeles, from Rochester, Minn., to New Orleans, and from Fort Worth to Charlotte, N. C.

We traveled and worked with over 200 salesmen and sales managers, from full-line producers with 1,000 or more items to specialty houses with as few as 20. Naturally, 200 salesmen isn't a lot, but coupled with our daily working knowledge of salesmen in many fields, we believe it was an adequate cross-section.

We're fortunate in another respect. We have had considerable experience in the food industry. We are privileged to develop the salesman and sales manager training programs for such food producers as General Foods, Campbell Soup, Coca-Cola, and Andrew Jergens. Thus we could relate what we saw in your men to the kind of selling we know is successful in other phases of the food industry.

Here is our overall reaction to what we saw:

NOT CAPABLE: Your men now, on the average, are not capable of handling the new demands of marketing and merchandising in the retail world that will soon be with us! We don't say they cannot *become* capable. We say they are not *now* capable, based on what we have seen. Your men, generally, do not measure up to what we see in salesmen with the more progressive food companies against whom you compete. For example, by and large, your men do not make as effective a sales call as competing food salesmen. Your men make *more* calls, and they spend less time per call. But the type of call is very routine. It's a monotonous pattern that repeats itself over and over. It goes something like this:

Salesman: "Good morning, Mr. Norton. How's it going?"

Dealer: "Hi, John, so-so."

Salesman: "What have you got for me today?"

Dealer: "Well, let's see. Gimme a box of franks, a box of pork loins, not too heavy, and what are you getting for beef rounds today?"

Salesman: "53c."

Dealer: "Well, better skip me on that. Got any fryers?"

Salesman: "Yes sir, 35c."

Dealer: "All right. Give me a box. That'll do it."

Salesman: "Thank you, Mr. Norton. I'll have this on tomorrow's truck."

As I think you will agree, there's very little selling in that conversational exchange. Our field check also indicated that your salesmen do not do as effective a job on *preparing* for the call, or in performing *follow-through* activities after the call.

The next point is, by and large, your men do not make as agreeable an impression on the dealer as competing food salesmen. In city after city we heard these complaints from dealers:

DEALER GRIPES: Packer salesmen never quote firm prices. We never know whether the price the salesman asks is the price he expects to get or not. Packer salesmen are the world's greatest suckers for a half-cent off. Packer salesmen don't bother to study meat retailing. The salesmen know their products, but a lot of them really don't know how to sell in order to put the deal across and to save my time.

Next point, by and large your salesmen are not as well organized as competing food salesmen. We found little evidence of adequate account records. The old-timers said they had the information in their heads; the newer salesmen had never been told that it is necessary to have any more than a dealer's name and address.

Territories are often poorly routed with considerable criss-crossing, zig-zagging, and back-tracking. Very few salesmen had adequate account classifications, so that



A PLEASANT MEAL to break up the hustle and activity of the day is enjoyed by the sausage committee at their luncheon in the Crystal room of the Palmer House on Saturday, September 27.

far too much time is devoted to accounts that do not deserve the attention.

Finally, your salesmen in general know less about modern retail food store merchandising (and do less to keep up) than competing food salesmen. Perhaps it's the nature of the business, but it was a rare salesman who knew or cared very much about the implications to his own business of self-service, departmental promotion activities, the trend toward the larger store, or prepackaging.

I am purposely painting the picture as black as I can, because I hope to convince those of you who have not yet started to do something (and very many of you have) that something needs to be done right away.

Unless you start doing something, the chains will continue to dictate prices and terms to you. Unless you start doing something, the per capita per cent of income spent for meat will continue to go down.

Unless you start doing something, profitability will get even lower than it already is.

Your objective, as we understand it, is to maintain or increase present volume, with expenses controlled, but to get more money for the product.

The solution is products well sold. This concept has many implications—products sold in balance, products sold so that they can be profitably resold, and assistance given to the outlet in merchandising to effect resale. That's the objective and the solution.

The problem is that while everything else has changed, the meat packer salesman and his selling methods have not changed. It's like a movie I once saw of Charlie Chaplin. Charlie was marching down a city street with a platoon of soldiers. At an intersection, the entire platoon turned right, but Charlie kept marching straight on down the street by himself. The entire food marketing and merchandising world has made a right turn, but the meat packer salesman goes marching straight ahead, and the two get farther and farther apart.

The comparative sizes of stores are changing rapidly. Years ago, on a typical salesman's territory, most outlets averaged out about 10 per cent large dealers, 30 per cent medium, 40 per cent medium to small and about 20 per cent very small. Now, there are just the very large and the very small. However, the same salesman is trying desperately to use the old techniques on the new situation.

Years ago the dealer was a man who worked with his hands. He carried a relatively short line of products, and minimum inventories. He lived and planned from week to week. His bookkeeping and accounting system was his cash register. Now, he is more than likely an administrator, a planner and a supervisor of 15 to 50 people. In short, he is an executive who guides the destinies of a $500,000 business. He has changed enormously from his counterpart of 20 years ago. However, your salesman who is calling on him has changed very little in this period of time.

Well, what about it? What can any packer do to bring his salesmen up-to-date and to provide them with the techniques and abilities to cope with our exciting new world? We believe there are four things:

1. Give them more to sell.
2. Make them better able to sell it.
3. Make them more responsible for selling it.
4. And start today to plan for tomorrow.

Let's consider these one at a time.

SELLING EXCITEMENT: First and foremost give them more to sell; your men need selling excitement. Here's what we mean by that suggestion. Your men make the same calls, on the same buyers, selling the same product, meeting the same objections day after day, week after week, all year long. The cancer of "sameness" eats away at a man's enthusiasm, and he falls into a comfortable, dull routine.

In contrast, most of the non-meat food product companies that compete against you constantly give their men something new and different to talk about on every swing around the territory. Last year General Foods introduced 17 new products; Standard Brands had 10 new ones; General Mills had 13 and Proctor and Gamble, at least nine.

These new items are never introduced in bunches. Rather, they are carefully spaced throughout the year with a hard-hitting promotion program built around each. The new item gets selling excitement. It gives



TWO PRESIDENTS AND ONE chairman of the board of their respective meat packing companies were the first recipients of the AMI's Community Relations awards "for exemplary achievements in the best traditions of neighborliness, citizenship and civic responsibility." LEFT: H. B. Huntington, president, Scioto Provision Co., Newark, O. CENTER: William Kling, president, Valley Pride Packing Co., Inc., Huntsville, Ala., is handed a plaque by the convention's "prestige-in-leather" model, Miss Mary Gale Gettinger. RIGHT: W. A. Barnette, jr., president of the Greenwood Packing Plant, Greenwood, S.C., receives the plaque for his father, Dr. W. A. Barnette, sr. Miss Gettinger, who handed the plaques to all winners, wore a cloud-white evening gown with flowing fishtail.

the salesman something new to talk about and it gives the dealer something new to hear.

The "something new" isn't always a completely new product; it can be a new package, or size, or pack of an old product. It can be a new way to promote the old product, or it can be a new program of advertising, or even publicity. Whatever it is, give your men something new and exciting to talk about periodically. And, from our own experience, it doesn't even need to be a *good* idea to help sales. Some years ago we devised a Christmas promotion for a local brewery. It was a gift idea—"Beer For A Year," and the salesmen were to put up displays in bars and taverns over the holiday to sell the idea. The men actually put up displays in 185 bars in that small territory. However, after the 10-day holiday season, we had sold the grand total of three gift orders!

We concluded that this was certainly one of our most colossal flops. Then we were informed that during that period, consumption and sales of the product increased 37 per cent over any previous year. The idea got the salesmen and dealers excited. It caused people to talk and to buy some of our client's beverage, although practically none bought that specific gift idea).

So, in one form or another, periodically provide your men with some form of selling excitement. Give them something new to talk about. It's good for them; it's good for your dealers, and it's good for the ultimate consumer of the product being promoted.

YOUR MEN NEED "BETTER TRAINING": Second, we suggest your salesmen and you will profit from better training for your men. Until recently, with several notable exceptions, most training in the packing industry has occurred through a process of "osmosis." A man got his training "through his pores," so to speak. He learned a little from talks with the beef cooler man, but he got most of his education from his customers.

You cannot afford to continue to operate on that basis any longer. The non-meat food producers who compete with you for the consumer's attention and stomach are doing intensive sales and manager training.

Campbell Soup has in operation at the moment: a two-week basic training course for newly-hired salesmen; a one-week training course for advanced salesmen; a sales supervisor training course; a district manager three-day training workshop for all their managers once a year, and in November we are preparing for them a two-day management training workshop for the use of the division and home office executive personnel.



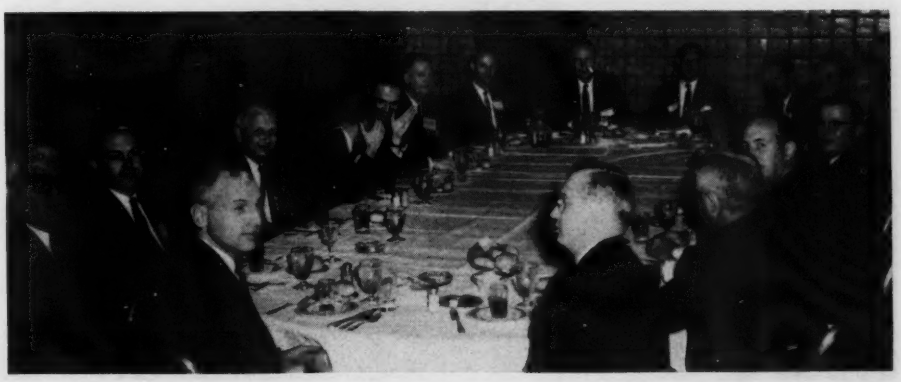
ALAN B. KLINE (RIGHT), ex-president of the American Farm Bureau Federation, receiving from AMI president Homer Davison the Institute's annual award for "a life-long contribution to the livestock industry." Soon after this picture was taken, Kline hopped a plane to attend the meeting of the International Federation of Agricultural Producers in Brussels. Cattleman Albert K. Mitchell was given this American Meat Institute award last year.

Those of you who have seen Campbell Soup's most recent financial statement will agree that, despite its age, it's an aggressive, rapidly-growing company with a very admirable record of profitability.

General Foods has seven different products, sales and manager training courses for its men. Every three months there is a one-day field training activity conducted by the district manager, and every four months a field training activity for the sales supervisors.

Of course, you might say that they need training because their products are constantly changing. Well, let's take Coca-Cola. Except for the introduction of new sizes, Coca-Cola hasn't changed its product for 40 years. However, the firm finds it necessary to devise training programs every year to keep the driver-salesmen enthused, aggressive, and continually using the proved techniques of effective salesmanship.

We keep mentioning Campbell Soup, General Foods, and Coca-Cola because we are most familiar with their training programs. However, we know that most other progressive food companies are devoting more and more attention to planned, formal types of sales training as



CONVERSATIONALISTS at left center of table continue (with gestures) as the rest of the group eyes the cameraman. Occasion was the luncheon of the Institute's personnel relations committee, held on Saturday, September 27.



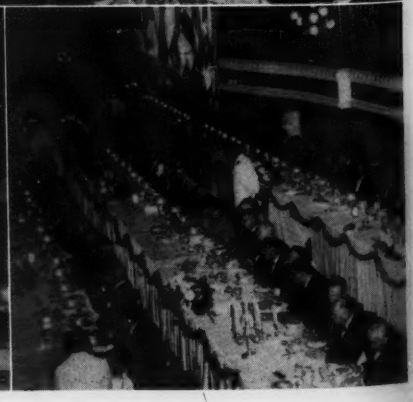












good songs, good food, good talks

featured the annual dinner on September 29. Songs were furnished by the Varsity Men's Glee Club, University of Illinois. Dynamic General Carlos P. Romulo, Philippine Ambassador to the United Nations, warned Americans to resist Communism, but win and regain friends in Asia. First AMI community relations awards went to H. B. Huntington, William Kling and Dr. W. A. Barnette, sr. **(See page 134.)**

things are just moving too fast today to leave anything to chance.

Even the men to whom you sell are now receiving very intensive modern training. Just one year ago, at the direction of Campbell Soup, we developed a training program for supermarket managers or operators. Already more than 267 of the major chains, co-ops, voluntaries, and independents have taken advantage of it. Right now 14,700 supermarket managers are in the midst of this training program. As Art Neilsen said, the calibre of the men now buying for the large retailers is first-class.

In the light of what's happening on every side, your salesman must not continue to be forced to work with his bare hands. He needs adequate product knowledge, selling techniques, and practical merchandising attitudes and ideas.

On the topic of product knowledge, your salesman needs to know at least this much about every major product he sells:

Product name, what it is, how it's made, why it's good, how it's used, selling sentences, and merchandising suggestions. Clients of ours who use this as a basis of product knowledge make it the outline for one small page. Then, they put on only as much information as can be written on the page. This is just for the salesman's major products.

On the topic of selling techniques, here's what our field check indicated your salesmen want and need information on:

How to make more effective calls.
How to sell a feature.
How to increase the number of items per order.
How to sell yourself.
How to sell quality.
Retail food store merchandising.
How to sell by telephone.
Meat department operation.
How to manage a route.

These nine topics are the basis of the Institute's one-year salesman's training program. However, this must not be just a one-year "shot in the arm" activity. It must continue and must be repeated again and again.



CONVENTIONEERS are waiting for a morning session to begin.

From a merchandising standpoint, your salesmen need to know more about self-service, and how their products can fit into a self-service operation. They need to know more about the mechanics of prepackaging. They need a better understanding of the new trends in store departmental promotion activities. They need to be able to help a dealer plan and conduct successful store promotion activities on the meat products he purchases from them.

CONTINUOUS TRAINING NEEDED: I think a concept we frequently forget is the fact that training, must be continuous to be effective. The ability to sell is, in many respects, similar to the ability to hit a golf ball. No matter how regularly you play, the longer you stay away from the pro, the poorer you get. However, in golf you can see the result of your gradual decline. The longer a salesman stays away from some form of training, the poorer he gets. He forgets the fundamentals. He experiments. He develops poor selling habits. However, it takes a lot longer to see the results in selling than it does in golf.

Give your men some form of periodic training. It inspires, it refreshes, and it pays for itself many times over. Here are some of the results reported to John Moninger from the Institute's current training program:

"The only opportunity we've ever had for real sales training."

"Practical and down to earth."

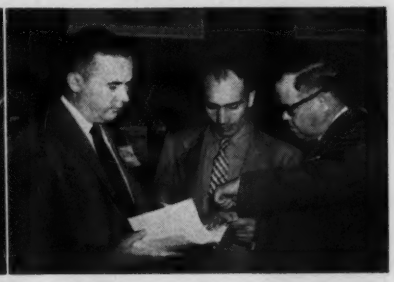
"Began to show results immediately after the first meeting."

"On a feature item we were able to more than double the volume and now, six weeks later, volume remains

LEFT: Oscar Mayer & Co., Inc., Madison, Wis., is represented by E. T. Meskill, general industrial engineer; H. T. Jaeke, vice president of planning and engineering, and A. G. Wolf, general personnel manager. CENTER: Talking things over are O. F. Matthews, assistant vice president in charge of beef operations, John Morrell & Co., Sioux Falls, S.D., and Edward Karp, president, Omaha Packing Co., Boston. RIGHT: Arthur Dietz, manager, and Harold Thomas, sausage department superintendent, both of Thies Packing Co., Inc., Great Bend, Kan., are seen with C. M. Fox (right), salesman from First Spice Mixing Co., New York City.







almost double the original figure, and the profit is up.

"Most of our salesmen now take a different attitude toward selling. They are beginning to think of themselves as professionals with pride in their performance."

"The size of our orders on the average is up substantially as a result of the sales meeting and followup on increasing the number of items per order. The program has shown a direct result in improving our realization."

Next, in our estimation, your men can profit from the application of better supervision. Our field check indicated that the salesmen are poorly organized. They have permitted themselves to be pushed into awkward route patterns; they have only a hazy notion of effective account classification, and thus are not spending the most time where the real potentials are; sequence of call is often dictated entirely by the demands of the outlets they are trying to serve.

MORE SUPERVISION: We believe there is a great need for meat packer sales managers to begin providing more supervision in three ways: first, through more field work-withs; second, through more effective sales meetings; and third, through more home office support. Field work-with by sales managers, we discovered happens infrequently. Of the 179 salesmen we traveled with, over 50 per cent had had no manager work with them in over six months, and another 25 per cent had had no work-with in a year or more. Field work-with is insisted upon by most of our other clients for every salesman at least once every three months. The sales manager must spend at least half a day calling on trade with the man. These people have discovered that periodic field work-withs are very important to the progress of the salesmen and the sales manager.

In the first place, they keep the sales manager abreast. He sees firsthand the conditions and problems the men are encountering. He sees how they are routing themselves, how they work and how dealers react to their presentations. It is helpful to the salesman because now he knows the manager knows. Salesmen are "people-reactors"—they work better when they know someone is checking. Because of this, a salesman needs more supervision than almost any other kind of employe.

A second activity through which your sales manager should provide better supervision is in sales meetings. During our field check activity we sat in on about 15 different sales meetings in many different companies. Frankly, the average of the meetings was not good. If we could visualize the reaction of the salesmen, it would probably be a combination of boredom and annoyance.



TRAFFIC was heavy from and to exhibit hall during the convention.

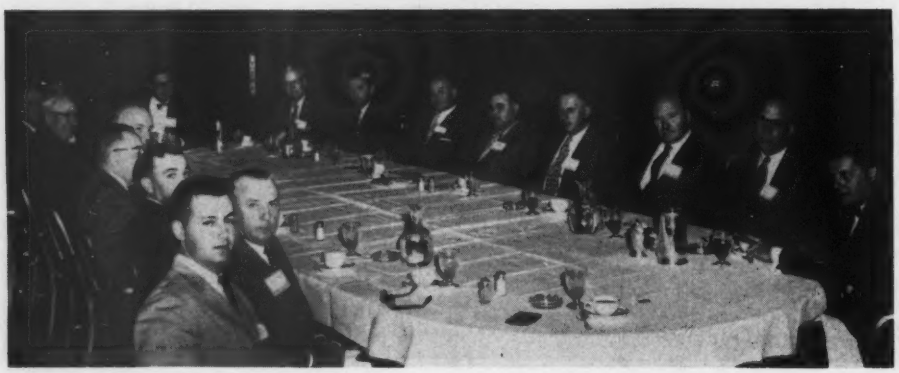
Generally, the topics covered in the meetings were current volume standings and comparisons and products which need extra effort. The rest of the meeting was devoted to "things I will no longer stand for." That is, demands, complaints, even veiled threats by the manager. In almost every instance it was a one-man show with little participation from the salesmen.

Sales meetings should be designed to maintain enthusiasm, to exchange ideas, to give direction, and to prepare to sell. The sales meeting is an opportunity for the sales manager to establish his leadership and to build morale and team spirit. In sales meetings the salesmen have a chance to train one another, and to sell one another on ideas. I can almost guarantee your men will profit measurably from more sales meetings as long as they are more effective sales meetings.

The third suggestion for increased supervision is—more home office support. Art Neilsen mentioned that one of the dealer complaints he uncovered was the inability of the dealer to obtain a firm price from the salesman on first call. We could change this to read "on first quotation." We have seen many instances of the salesman quoting a price and the dealer saying he's too high. Later, the dealer phones the manager and gets a lower quotation. Apparently, there are many variations of this theme.

We have heard recently that several packers have eliminated the time-honored "shade" that salesmen had. Now, no one but the product department head has the

[Continued on page 158]



LARGE GROUP of westerners from Pacific Coast states was led to the convention by AMI representatives Wick Stephens and Carroll Cannoles. They are shown here having breakfast together before the session on Saturday.

Leading packers select Du Pont cellophane



for sparkling transparency, correct protection



and high-speed packaging

JOHN ENGELHORN & SONS, Newark, N.J., and Philadelphia, recently adopted Du Pont cellophane after testing various meat-packaging films. Here's what an Engelhorn official reports:

"*Crystal-clear cellophane has the eye-catching sparkle and smooth surface that give our meats extra sales appeal. Cellophane offers excellent protection, too. Its tight seal safeguards product even under rough handling and keeps the flavor in our meats. And Du Pont film quality helps us keep our production line running smoothly.*"

• • •

When selecting a material to meet your packaging requirements, consider *all* of the advantages of cellophane. For complete details on why cellophane is the preferred film and what it can do for your operation, consult your Du Pont Representative or Authorized Converter of Du Pont cellophane today. E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware.

SPECIFY DU PONT cellophane by code designation when you order. LSAD and MSAD-86 are among the films tailored to meet specific needs of meat packaging.

DU PONT cellophane

DU PONT
REG. U. S. PAT. OFF.

Better Things for Better Living . . . *through Chemistry*

Good packaging is good merchandising . . . the most effective packaging material is cellophane

THE P. BRENNAN COMPANY

LEE Brand

CANNED MEATS

STRAIGHT AND MIXED CARS • FRESH PORK AND PROVISIONS

UNION STOCKYARDS - CHICAGO 9, ILLINOIS

YArds 7-4600

Peters

Model SE Carton Forming & Lining Machine

automatically forms and lines up to 120 cartons per minute



Another high-speed, cost-cutting packaging machine—Peters Model SE Carton Former and Liner—cuts roll-fed paper to proper size liner sheets . . . then folds liner sheets and low cost carton blanks together to form perfectly shaped lined cartons. Can be made adjustable to set up a variety of sizes for lard, shortening, tea bags, cookies, etc. Write for catalog describing this and other Peters packaging machines.

For 60 years originators and builders of high speed automatic packaging and bakery machines.

Peters

MACHINERY COMPANY

4704 Ravenswood Ave., Chicago 40, Ill.
All Phones: LOngbeach 1-9000

TRAM RAIL & MONO RAIL SYSTEMS

Designed, fabricated, and installed to your specifications.

•

Complete Slaughtering, Packinghouse and Sausage Plant Machinery and Equipment

•

TRACKS — TROLLEYS — SCALES — RACKS
MATERIAL HANDLING EQUIPMENT

Contact Us Today

H. H. EDWARDS, Inc.

ENGINEERS and CONTRACTORS

550 W. 53rd St. New York 19, N. Y.

Phone: CIRCLE 7-5630

This "Multi-Million-Mile" International Diesel

takes more payload, piles up more profit



INTERNATIONAL model DCOF-405—The "Multi-Million-Mile" diesel is setting new economy and operating standards with 180 hp. Cummins NH-180 engine. Four- and six-wheel models available with Cummins engines for applications from 55,000 to 76,800 lbs. GCW.

Not one detail of quality was spared to create this money-making INTERNATIONAL diesel highway tractor.

From its aerodynamic cab to every husky gusset in its frame, this is a truck that's premium-built to stay on the road, trip after trip after trip.

Even *normal* service downtime is less. And when service is needed you'll find its tilt cab design gives *clean* access from fan belt to flywheel housing.

Proof of unsurpassed performance is well established. Fleet owners report they move *more* tons with fewer tractors using INTERNATIONAL "Multi-Million-Mile" diesel models.

This is a truck that gives *new* meaning to low per-mile operating costs. A truck that outmodes all previous standards of durability and long life. For full details call or stop in and see your INTERNATIONAL Dealer or Branch, now!

International Harvester Company, Chicago
Motor Trucks • Crawler Tractors
Construction Equipment • McCormick®
Farm Equipment and Farmall® Tractors

INTERNATIONAL TRUCKS cost least to own!

STANcase STAINLESS STEEL EQUIPMENT



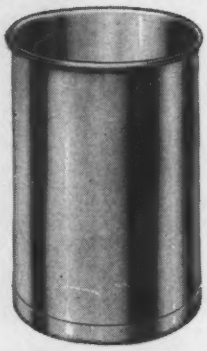
STAINLESS STEEL MEAT TRUCKS

STANcase STAINLESS STEEL MEAT TRUCKS have been carefully engineered to meet the requirements of modern plants for long-life equipment which can be maintained sparklingly clean and sanitary with minimum labor. There are five STANcase Trucks with capacities of: 225 lbs., 500 lbs., 800 lbs., and 1,200 lbs. Each model has been sturdily constructed of heavy gauge Stainless Steel. Specifications for all component parts are of highest quality standards.

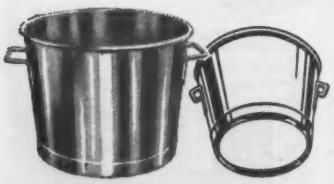
LONG-LIFE EQUIPMENT
FULLY APPROVED BY HEALTH AUTHORITIES

Sanitary STAINLESS STEEL DRUMS

Ruggedly constructed for long-life service of 16 ga. Stainless Steel. Inside surfaces are seamless. Top rims are rolled over heavy reinforcing rods; foot rings are made of extra heavy Stainless Steel; both are closed all around, leaving no crevice where dirt or grime might accumulate. Available in three sizes.



Model No. 30—30 gal. cap.
Model No. 55—55 gal. cap.
Model No. 60—60 gal. cap.
COVERS AVAILABLE FOR No. 30 and No. 55



All-Seamless STAINLESS STEEL TUBS

Model No. 98 — 56 qts.
Model No. 97 — 34 qts.
COVERS AVAILABLE

Ideal, sanitary equipment, seamless-drawn out of one sheet of 18 ga. Stainless Steel. The Stainless Steel foot ring and top rim are rolled over heavy, steel reinforcing rods and closed all around, leaving no crevice where grime might accumulate. Handles are Stainless Steel. Foot ring takes abuse of service; bottom of tub does not rest on floor.

WRITE FOR CATALOG

Manufactured by

THE STANDARD CASING CO., Inc. 121 Spring St. New York 12

1958 PACKING GUIDE See Page H/51

Serving the meat packing industry

SMITH, BRUBAKER & EGAN

30 NORTH LaSALLE ST. CHICAGO 2, ILLINOIS

ARCHITECT & ENGINEERS

LELAND

Trade Marks LELAND and S.E.#11 Registered U.S. Pat. Off.

"POTENT TO THE LAST GRAIN"

CLEANING AND STERILIZING COMPOUNDS

"30 years of continuous service to the Meat Industry"

LELAND CHEMICAL CO., INC.

838 S. FIRST STREET, MILWAUKEE 4, WISCONSIN

Distributors in Principal Cities

HYGRADE'S®



• BEEF • VEAL • PORK • LAMB

• ALL BEEF FRANKFURTERS

• *Complete line of* SAUSAGE AND SMOKED MEAT

• WEST VIRGINIA SMOKED HAM

• CANNED HAMS and PICNICS

Let us work with you...

INQUIRIES WELCOME AT ANY BRANCH OFFICE

HYGRADE FOOD PRODUCTS CORP.

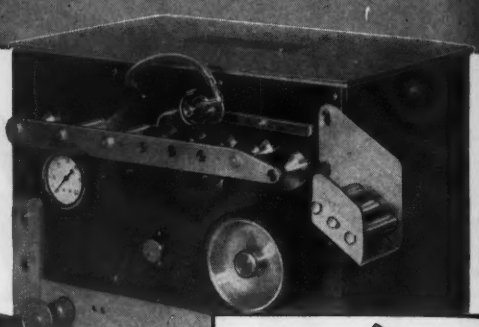
EXECUTIVE OFFICE: *2811 Michigan Ave., Detroit 16*

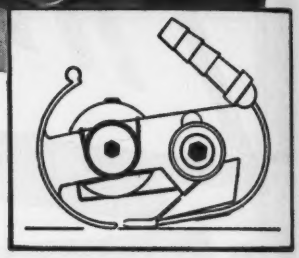
THE TEE-CEE WIENER PEELER

USES NO STEAM OR WATER!

1958 Packinghouse Guide

See Page H/To





The Tee Cee Peeler will peel at least 500 lbs. of average size franks an hour. Will peel any size wiener or frank made in artificial casing.

No product lost, cut or scarred, and no sorting or repeeling necessary. The efficiency and mechanical simplicity of the Tee Cee Peeler is highly praised by all users.

COMPACT—Shipping size is 14" x 14" x 19". Operating space required is 14" x 42" to 49".

MAINTENANCE—The Tee Cee Peeler is built of stainless steel and anodized aluminum. There is nothing to get out of order or adjustment and daily clean up with hot water is all that is necessary.

New patented mechanical features including this new cutter head for more efficient operation.

FOR FULL INFORMATION WRITE

THE TEE CEE MANUFACTURING CO.

7545 KIRTLEY DRIVE, CINCINNATI 36, OHIO

CANADIAN REPRESENTATIVE: Mr. Walter Presswood, 30 Maybank St., Toronto • SOUTHEASTERN REPRESENTATIVE: Mr. R. Starr Parker, Starr Parker Incorporated, 843 Marietta St., N.W., Atlanta 18, Ga. • NORTHEASTERN REPRESENTATIVE: Lucas L. Lorenz, Inc., 80 Gerry Street, Brooklyn 6, N. Y.

AGAR'S



CANNED MEATS
SMOKED MEATS

"Depend on Quality"

AGAR PACKING COMPANY

U. S. YARDS
CHICAGO 9, ILLINOIS

OUR *48th* YEAR...

FREDRICK B. COOPER CO., INC.

25 Broadway **New York**

BROKERS

ALL PACKING HOUSE PRODUCTS

- Provisions
- Beef and Lamb
- Fats and Oils
- Canned Meats

Send coupon below for specifications and prices.

It's the Jourdan

STAINLESS STEEL PROCESS COOKER

for Convenient, Speedy and Economical Sausage Cooking

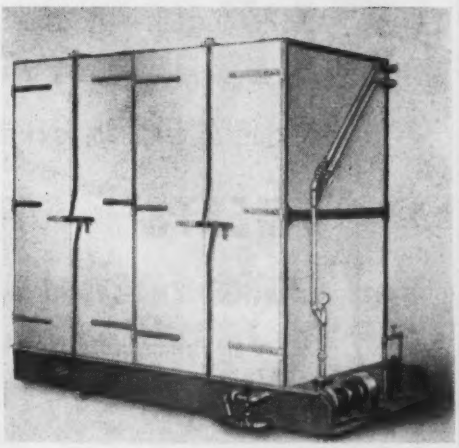
- ✓ The JOURDAN saves costly labor
- ✓ The JOURDAN cooks full cage of sausage right on the rail
- ✓ The JOURDAN requires no handling of product
- ✓ The JOURDAN cooks faster and better
- ✓ The JOURDAN offers greater savings in shrink
- ✓ The JOURDAN eliminates burst, broken and tangled sausage
- ✓ The JOURDAN applies color as sausage cooks (if desired)
- ✓ The JOURDAN assures a cleaner and improved product

A HOT WATER COOKER—Cooks with hot water, with or without color. Loaded cages or trucks are rolled directly into the cooker. Jourdan engineering means an improved product with real sales appeal.

FULLY EQUIPPED—EASY TO OPERATE—Standard equipment includes electric motor, centrifugal pump, thermostatically controlled regulator, dial indicating thermometer, adjustable rail hangers and all integral piping and fittings. The Jourdan is unrivaled in ease of operation.

STANDARD OR SPECIAL MODELS—Available now in 3 standard models . . . Single Cabinet—Double Cabinet—Twin Unit . . . Each model in 4 standard sizes and 4 types of construction . . . Regular—Galvanized & Stainless Steel Trim—Semi-Stainless Steel . . . and Deluxe Solid Stainless Steel. Or, Special models and sizes can be built to your specifications.

THE JOURDAN VAPOR COOKER—This popular Cooker does an excellent cooking job and is far superior to the old-fashioned steam box.



Manufactured under patents of William Jourdan, Inventor.

JOURDAN
PROCESS COOKER CO.

814-832 W. Cullerton St.
(20th St.)
CHICAGO 8, ILLINOIS
CAnal 6-3846

Gentlemen:

Please send full details concerning the Jourdan Process Cooker.

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____



JOHN E.

STAREN CO.

FRESH, CURED, SMOKED, CANNED

MEATS

LARD, FATS and OILS

and all Packinghouse Products

CHICAGO OFFICE:
120 SOUTH LA SALLE STREET
Telephone .....**RAndolph 6-9277**
Teletype .....**CG 1481**
Cable Address .....**JONSTAR**

CALIFORNIA OFFICE:
117 WEST NINTH STREET
LOS ANGELES
Telephone .....**Michigan 7507**
Teletype .....**LA 56**

ATTENTION ALL FEDERAL INSPECTED PLANTS

WE will buy your edible beef fats, S/P fats and fresh pork fats.

WE can arrange for pickups.

WE are equipped to render 2,000,000 lbs. per week.

Contact our office.

TELEPHONE REGENT 1-2255
TELETYPE—CHICAGO CG3317

CHICAGO REFINING CORP.

9101 S. Baltimore Ave., Chicago, Ill.
U. S. Inspected #1269

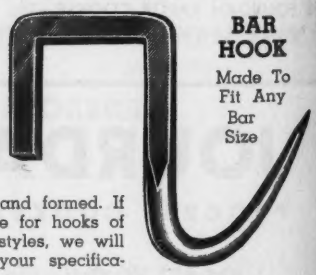
"Tools of the Trade"



MOUND TOOLS

Specify "MOUND" for:

- **TRACK ROLLERS**
- **ROLLER HOOKS**
- **BAR, CAR, HOG HOOKS**
- **BELLY SPREADERS**
- **BUTCHER STEELS**
- **BLOCK SCRAPERS**
- **BLOCK BRUSHES**
- **BACON HANGERS**



BAR HOOK
Made To Fit Any Bar Size

BEEF TROLLEY
All MOUND HOOKS are double-dipped in tin or galvanized . . . expertly forged and formed. If your requirements are for hooks of other than standard styles, we will make up hooks to your specifications.

MOUND TOOL CO.

Seventh and Hickory Sts., St. Louis 4, Mo.
See Advertisers Index for Local Distributor

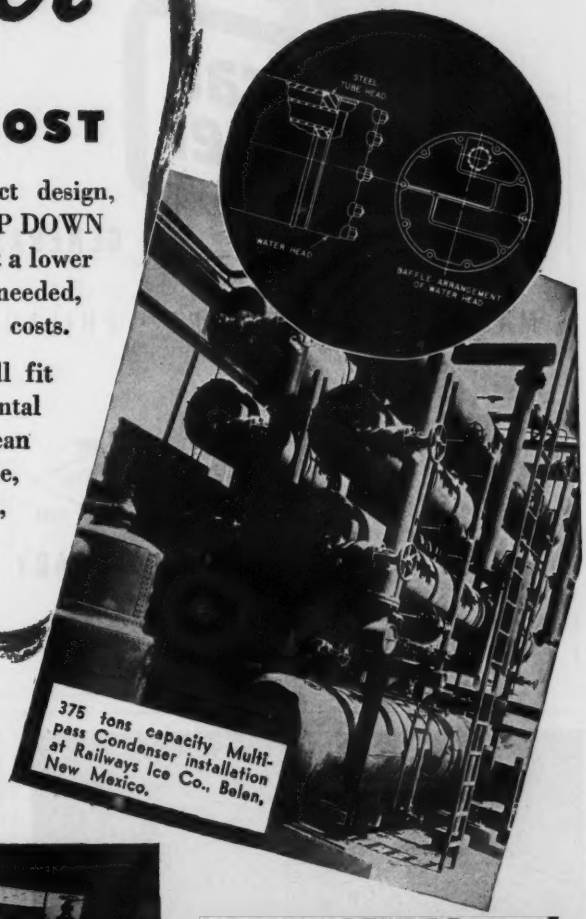
$ave Power and REFRIGERATION COST

Vogt Condensers, because of their correct design, STEP UP the rate of heat transfer and STEP DOWN head pressures. With the liquid delivered at a lower temperature, smaller compressor capacity is needed, saving in original as well as operating costs.

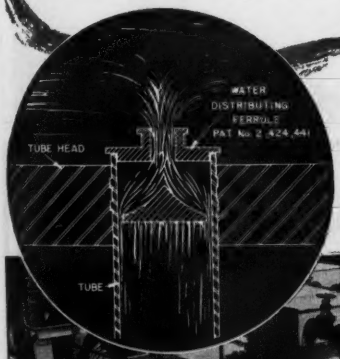
One of the two basic types illustrated will fit your operations exactly. Install Horizontal Multipass (closed type) for use with clean waters. Where the water is hard, forms scale, contains mud or promotes fungus growth, Vertical Single Pass (film type) which can be cleaned in operation, are recommended.

Horizontal Multipass Condensers
(Closed Type)

Water circulated in tubes traverses the length of the unit a number of times as determined by baffles in the heads.

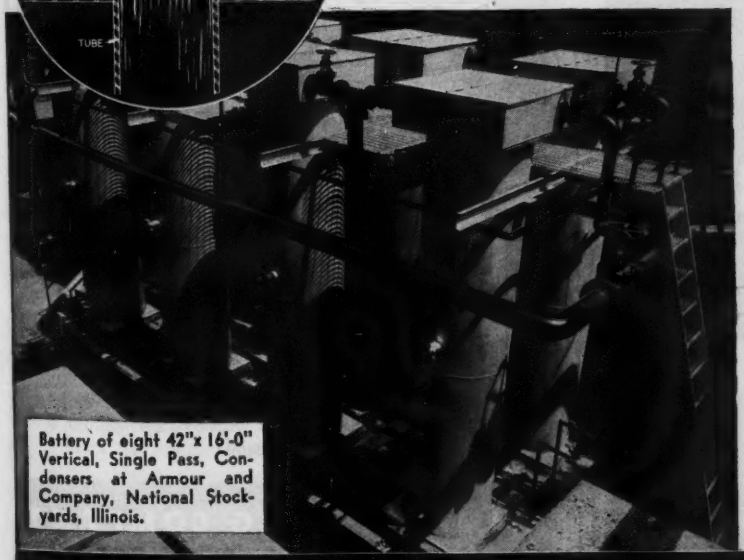


375 tons capacity Multi-pass Condenser installation at Railways Ice Co., Belen, New Mexico.



Vertical Single Pass Condensers
(Film Type)

Patented ferrules give equal distribution of water to and over the surfaces of all tubes in a unit.



Battery of eight 42"x 16'-0" Vertical, Single Pass, Condensers at Armour and Company, National Stockyards, Illinois.

HORIZONTAL and VERTICAL TYPES SHELL and TUBE CONDENSERS For Every Service

Write For Bulletin RC-2

1958 Purchasing Guide

Address Dept. 24A-RINP

See page E/Vo

HENRY VOGT MACHINE COMPANY
INCORPORATED
1000 W. ORMSBY ST., LOUISVILLE 10, KY., U.S.A.

Sales Offices: NEW YORK, CHICAGO, CLEVELAND, DALLAS, CAMDEN, N. J., ST. LOUIS, CHARLESTON, W. VA.

Vogt REFRIGERATION CONDENSERS

Oscar Mayer

GENERAL OFFICES: CHICAGO

MADISON · DAVENPORT · PHILADELPHIA · LOS ANGELES · ATLANTA

75th
1883 1958
ANNIVERSARY

SEVENTY-FIVE YEARS OF PROGRESS
IN FINE MEAT PROCESSING

1933-1958

TEE-PAK
CELEBRATES
ITS 25th
ANNIVERSARY

Your Dependable Source for

DRESSED BEEF

WIMP PACKING COMPANY

Carload Lot Producers of Carcass Beef, Beef Cuts, Boneless Beef, Beef Offal

Phone: YArds 7-6565

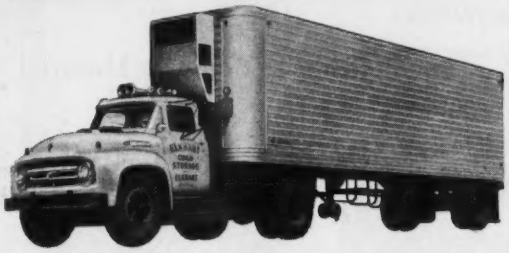
W. McDermott
H. King
A. Dust, Jr.
Wm. Russell

WIMP PACKING COMPANY
1119-27 West 47th Place • Chicago 9, Ill.
U. S. Government Inspected Establishment 791

Subsidiary of RUSSELL PACKING CO.
Pork Packers
Normal Ave. at 40th St. Phone BOulevard 8-1200

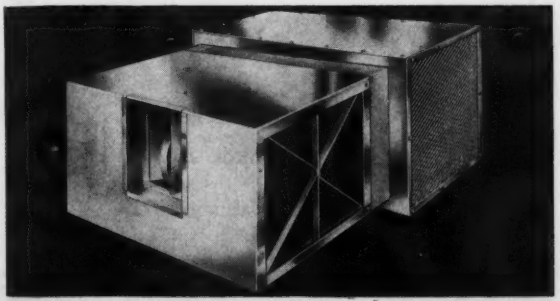
TRANSPORTATION REFRIGERATION PROBLEMS?

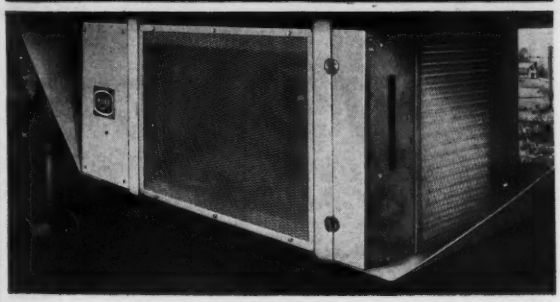
HERE'S THE ANSWER!



DOLE *Lektro-Cel*

FOR UNDERFRAME OR NOSE MOUNT





Completely electric . . . Powered by a heavy duty, light weight, engine-mounted generator . . . Same type of power as nighttime plug-in . . . Full capacity hermetic compressor.

- Blower coil, **Cold-Cel** Holdover Truck Plates or **Truk-Cel** Eutectic Blowers can be used.
- **Heat-Cel** Automatic Hot Gas Defrost on low temperature blower coil systems.
- Heating available for winter.
- Auxiliary truck-mounted electric equipment (pumps, hoists, lights, etc.) operated from same power source.
- Only standard electrical and refrigeration circuits used.

DOLE REFRIGERATING COMPANY
5946 NORTH PULASKI ROAD, CHICAGO 46, ILLINOIS
103 PARK AVENUE, NEW YORK 17, N. Y.
Dole Refrigerating Products Limited, 29 Brock St., N., Oakville, Ont., Canada

Write for Engineering Catalog HE

Maximum Refrigeration Efficiency DOLE THE Cel LINE

Lektro-Cel



THE PERFECTLY BALANCED PHOSPHATE!

- Assures better cured color
- Retains natural juices
- Eliminates soggy or weepy hams
- Higher yields
- Complies with M.I.B. regulations
- Blended to give highest solubility
- Non-corrosive in meat curing pickle

Send today for KUREX story

BLACK DIAMOND

ARCHIBALD & KENDALL, Inc.
487 Washington Street, New York 13, N. Y.
Tel: WOrth 2-7715

AULA

☐ Send full KUREX information
☐ Send adequate working samples

Name_____

Address_____

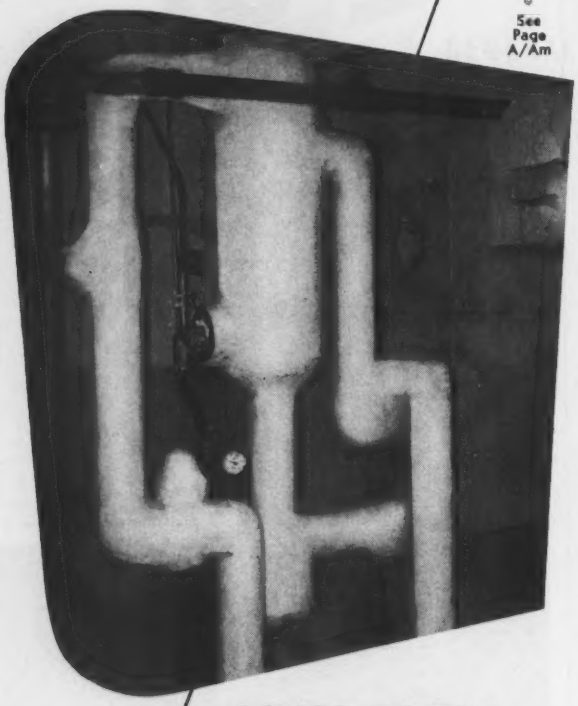
City_____ State_____ Tel._____

GENUINE

OZITE.*

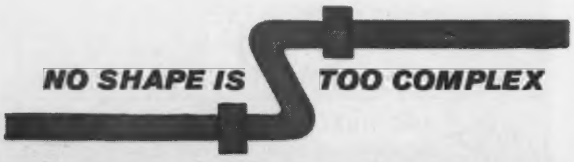
STANDARD *All-Hair*
PIPE COVERING
INSULATION

1958 Purchasing Guide
See Page A/Am



• *saves power*
• *lasts a lifetime*
• *fits any form*

Leading refrigeration engineers find that wasteful heat flow is stopped quickly and easily by covering pipes and ducts with Ozite all-hair insulating felt. They find that easily-installed Ozite steps up refrigerating capacity of their equipment and reduces power consumption.



A PRODUCT OF
AMERICAN HAIR & FELT COMPANY

MERCHANDISE MART • CHICAGO 54, ILLINOIS

E. A. DERBA

BROKER

Specializing in Sausage Material

CAR LOTS — **BONELESS BEEF, VEAL** — BARREL LOTS
PORK and TRIMMINGS

ARGENTINE CURED BONELESS
COW MEAT BULL MEAT
AUSTRALIAN BONELESS MUTTON

•

130 Newmarket Sq., Boston 18, Mass.

Telephones Highlands 2-0512 - 0513

Teletype Roxbury 1072

VEAL

- **CARCASSES**
- **BONELESS CUTS**
- **OFFAL**

BROKER INQUIRIES INVITED

MARGIE BRAND BNLS. VL. LEGS

JOHN POLLAK PACKING CO.

NORTH AURORA • ILLINOIS

U. S. Establishment 788

PHONES { (AURORA) 2-4515
(CHICAGO) MOnroe 6-8115-6-7

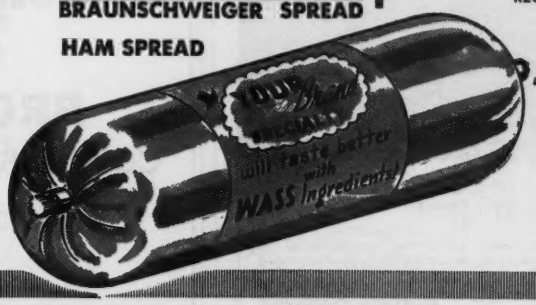


TOP MONEY-MAKERS . . . use the proven dressings for all meat-base spreads...

SANDWICH SPREAD
BRAUNSCHWEIGER SPREAD
HAM SPREAD

MELLO-MIX

REG. U.S. PAT. OFF.
SPECIAL MEAT PACKERS BLEND



MELLO-MIX fulfills need for absorbing meat ends, breakages, and left-overs . . . and preparing them as a salable item. Proven formulas are available on request.

the OPEN PIT barbecue sauce

Just Right With a Mild Bite

THE NATURAL PARTNER TO ALL MEATS

The accepted flavoring for all meat preparations.

WRITE TODAY FOR FULL PARTICULARS!



WASS FOOD SALES, INC. • 1042 W. Randolph St., Chicago 7, Ill. MOnroe 6-1234

HESS-STEPHENSON CO.

BROKERS

327 S. LA SALLE STREET — CHICAGO 4, ILL.

PACKING HOUSE PRODUCTS
BEEF—PROVISIONS—LARD
SAUSAGE MATERIAL

BONELESS AND CARCASS BEEF, MUTTON, VEAL
from
NEW ZEALAND, AUSTRALIA, SOUTH AMERICA

PROVISIONS .....PHONE: WAbash 2-5690
BEEF .....PHONE: WAbash 2-0440
TELETYPE: CG 2287-8
CABLE ADDRESS: HESTE

EASTERN OFFICE:
408 W. 14th ST., NEW YORK 14, NEW YORK
Phone: CHelsea 2-3455 TELETYPE NY 1-4572

Affiliated with: NEWMARKET BROKERAGE CO.
130 NEWMARKET SQUARE, BOSTON 18, MASS.
Phone: GArrison 7-4630
TELETYPE: Roxbury Mass 1063

NOW you can produce



"Sausage at its Best in its Natural Dress"

with *A. Dewied*

SELECTED NATURAL HOG AND SHEEP CASINGS

We wish to thank our many friends for visiting us during the AMI Convention



A. DEWIED CASING CO.

MAIN OFFICE: P.O. BOX 562 - SACRAMENTO, CALIF.



Barrel Storage Room
Stock Yards Packing Co., Inc., Chicago 12, Illinois

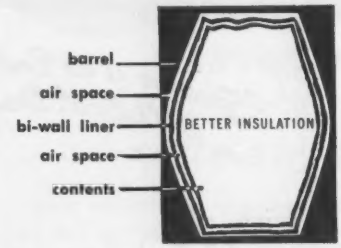
With Bi-Wall double wall barrel liners, our orders are delivered in excellent condition. They afford the extra protection for added customer satisfaction.

Walter Bulawa
Traffic Manager
Stock Yards Packing Co., Inc.

INSULATION

CUTS ICE COSTS **25%**

BI-WALL
DOUBLE WALL
BARREL LINER



. . . for better product protection

. . . for lower shipping costs

Bi-Wall's exclusive construction uses air space — Nature's own insulating medium — to prevent too-rapid cooldown. Thus, Bi-Wall keeps your meat products fresher longer — at much lower cost.

This simple, trouble-free packing method requires no costly equipment, no big space-wasting inventory. Easy-to-use, takes no extra packing time.

Prove it to yourself today!

AMERICAN CASE LINER CO.
1662 N. Elston Avenue Chicago 22, Illinois

G. E. TAYLOR

Associates:
R. K. GRIFFIN
N. M. APPLEYARD, JR.
C. J. CAWLEY III
R. S. BOYNTON

P. G. GRAY COMPANY

Established 1895

BROKERS and
COMMISSION MERCHANTS

BOSTON, MASSACHUSETTS

•

Our Sixty-Fourth Year Selling Packing House Products Exclusively in New England

•

TELETYPEWRITER: BOSTON 550

PHONE: LAFAYETTE 3-3260

DON'T GUESS . . GET

Goetze's

CHOICER MEATS

They SELL. They have the quality . . . the flavor . . . the consumer acceptance. They win customers.

Leading Manufacturers of Complete Line of Smoked Meats, Fresh Meats and Sausage Items.

ALBERT F. GOETZE, Inc.
BALTIMORE, MARYLAND

EDWARD R. SEABERG COMPANY

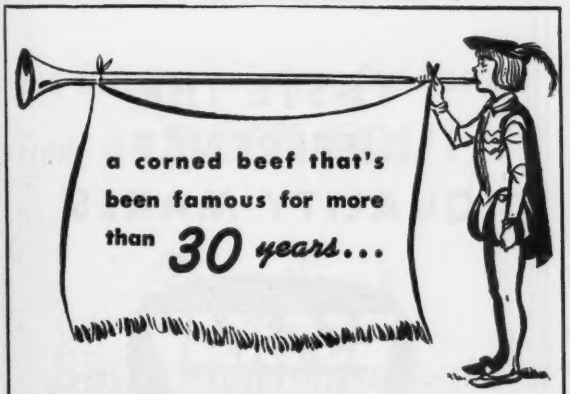
Brokers

SAUSAGE CASINGS

•

BOARD OF TRADE BUILDING
CHICAGO 4, ILLINOIS

Telephone: WAbash 2-9371 • Teletype CG 2095
Cable Address—EDSEA—Chicago



Harding's
FAMOUS CORNED BEEF

Not to be confused with ordinary corned beef

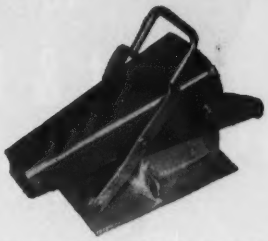
now offered to wholesalers interested in creating more customers and bigger profits!

INQUIRIES INVITED

JOHN P. HARDING MARKET CO.

728 W. MADISON ST. CHICAGO 6, ILLINOIS
Phone: STate 2-8050

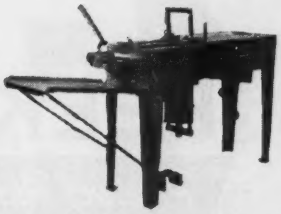
SERVING THE INDUSTRY FOR OVER 30 YEARS WITH *NEW* IDEAS ON CUSTOM MADE EQUIPMENT AND PRODUCTS OF OUR OWN DESIGN.



#107-BS BUTT STUFFER Outlet closes to 2¼" x 2". Opens to 2¼" x 4". Use 2⅜", 2¾" and 3¼" casings.



#114 STAINLESS STEEL STUFFING HORNS Seamless S.S. tubing ground and polished to perfect smoothness. Standard (12¾") and special lengths available.



#100 PNEUMATIC HAM PRESS Sanitary welded construction with a 16½" chamber. Operates on 60-125 lb. air pressure. Molds available.

If You Have An Engineering Problem, Whether You Are a

Meat Packer
Sausage Manufacturer
Meat Processor or
Renderer

Call on SMECO to Solve It

Over 30 Years of Practical Know-How Available to You and Your Staff.

Send for your FREE copy of our NEW catalog.

SHEET METAL ENGINEERING CO.

4800 S. Hoyne Chicago 9, Ill.
VI 7-7622

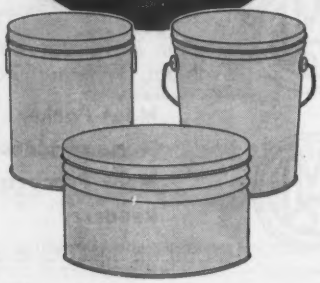
Especially Designed for Meat & Lard Products



HEEKIN

Product Planned

CANS



Heekin Product Planned Cans . . . either plain or brilliantly lithographed . . . are manufactured for your specific meat or lard products. Your product goes to market dressed for fast sales and for satisfied customers. Call Heekin today!

THE HEEKIN CAN CO. *PLANTS IN OHIO, TENNESSEE & ARKANSAS' SALES OFFICES; CINCINNATI, OHIO; SPRINGDALE, ARKANSAS*

SARATOGA

meat products company



finest quality

6342-58 WENTWORTH AVENUE
CHICAGO 21, ILLINOIS

TASTE THE DIFFERENCE QUALITY MAKES

ESSKAY QUALITY

MEAT PRODUCTS
POULTRY AND
DAIRY ITEMS

The W. Schluderberg-T. J. Kurdle Co.
Baltimore 3, Maryland

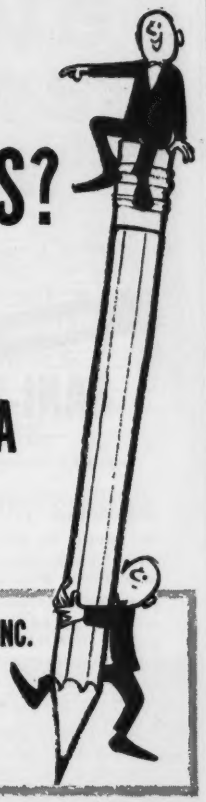
Ordering LARD FLAKES?

GET YOUR FIRST QUOTATION FROM

SHORTENING CORP. OF AMERICA

Join the hundreds of meat packers who are glad they talked to S. C. A. first.

SEND FOR SAMPLES



SHORTENING CORP. OF AMERICA, INC.
U. S. GOV'T INSP. EST. 1039
542 Henderson Street • Jersey City, New Jersey
For quotations call
JERSEY CITY: Telephone OLdfield 3-3232
JERSEY CITY: Teletype JC 114
NEW YORK CITY: Telephone WOrth 2-2400

The Original 125 Year Old Recipe from the ***DEEP SOUTH***

Crayton's

Southern Sausage

For the taste treat of the century try

CRAYTON'S SOUTHERN SAUSAGE
CRAYTON'S SMOKED & POLISH SAUSAGE
and
CRAYTON'S OLD FASHIONED SOUSE

U. S. Govt. Inspected Est. 558

Home Office: 2746 E. 53rd Cleveland, Ohio

Goodbye

raincoats, boots and other paraphernalia!



smokehouse cleaning

is **SAFE** *when you use* **DuBOIS'**

BLAST

Your personnel will get assured safety when they're using DuBois' BLAST. BLAST's special blend of emulsifiers, not high caustic, works fast to melt-off creosote, grease and carbon. USDA approved BLAST is the leading *time*, *money*, and *labor* saving smokehouse cleaner for every packing house.

Get more data how DuBois' BLAST and other packing house cleaners can save you operating costs with premium results. Write Dept. LB, Food Industry Division, The DuBois Co., Inc., Cincinnati 3, Ohio today.

THE DuBOIS CO., INC.
CINCINNATI
Other Plants: LOS ANGELES • DALLAS • E. RUTHERFORD, N. J.
Representatives and Warehouses Coast to Coast

√Maximum Grease Recovery!
√Better Quality By-Products!
√Lower Cost-Per-Ton!



WILLIAMS
"NO-NIFE" HOGS & HAMMER MILLS

Williams' wide experience in the recommendation of correct equipment for more efficient grinding and crushing has invariably increased output and decreased costs for hundreds of packers and processors. Here are a few benefits Williams Equipment can give YOU:

GREATER GREASE RECOVERY by properly preparing green bones, carcasses, entrails, meat scraps, etc., without the use of excessive heat and regardless of extraction method.

CONSTANT BY-PRODUCT UNIFORMITY by correctly grinding and handling of dry bones, cracklings or tankage, and glue stock.

MORE EFFICIENT OPERATION — The reduction of dry materials down to 8 mesh — or the grinding to small size of materials with high grease content is done more quickly, easily and economically — *in one operation!*

There are many other profitable advantages provided by Williams' know-how and equipment. It's good business to discuss your present grinding and crushing methods with Williams.

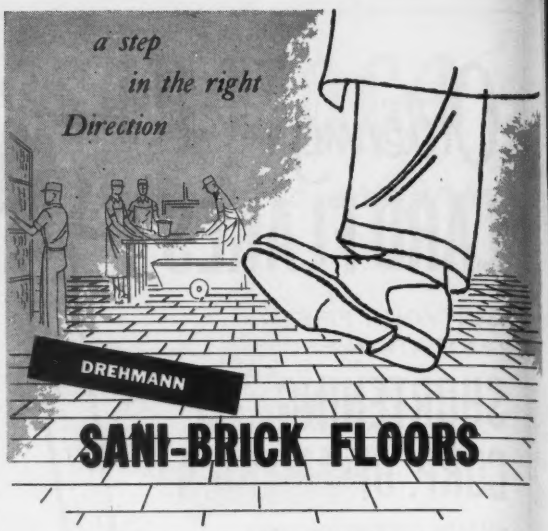
Write Today!

WILLIAMS COMPLETE LINE ALSO INCLUDES:

- COMPLETE "Packaged" PLANTS engineered to deliver finished saleable by-products
- VIBRATING SCREENS
- STEEL BINS
- BUCKET ELEVATORS AND CONVEYORS

WILLIAMS PATENT CRUSHER & PULVERIZER CO.
2708 NORTH NINTH STREET ST. LOUIS 6, MO.

WILLIAMS
CRUSHERS GRINDERS SHREDDERS
OLDEST AND LARGEST MANUFACTURER OF HAMMER MILLS IN THE WORLD



SANI-BRICK FLOORS

Let DREHMANN install a SANI-BRICK FLOOR while your plant is operating!

No trouble, no fuss, and you'll have sanitary, easy-to-keep-clean brick flooring that withstands high impact-moisture-acids-alkalies-and other corrosives for many, many years.

Many DREHMANN-installed floors are more than 30 years old! You get 88 years of floor-installation "know how" when you let DREHMANN do the job.

DREHMANN HAS THE FLOOR FOR MODERN INDUSTRY

Originators of Brick Floors Established 1869

DREHMANN
—SANI-BRICK FLOORS—

DREHMANN PAVING & FLOORING CO.
Gaul and Tioga Streets • Philadelphia 34, Pa.
507 Fifth Avenue • New York 17, N. Y.

SERVING SAUSAGE MANUFACTURERS
MEAT CANNERS
DRIED BEEF MANUFACTURERS AND
HOTEL AND RESTAURANT SUPPLY DEALERS

GOVERNMENT INSPECTED

BONELESS BEEF
and
BEEF CUTS

BONELESS BEEF PREPARED FROM NORTHERN CANNER, CUTTER, AND UTILITY COWS AND HEAVY NORTHERN BOLO BULLS.

HIGHEST UNIFORM QUALITY THROUGHOUT THE YEAR PRODUCED IN OUR NEW AND MODERN PLANT.

L. T. L. OR CAR LOAD INQUIRIES INVITED

CALL JOHN OR NORMAN RUBIN ALL PHONES—CLIFFSIDE 4-1822

Normal Meat Company
4122 South Union Ave. — Chicago 9, Ill.

CASING COLORS

(PRIMARY STRENGTH)

ATLAS

Certified Food Colors

INDUSTRY'S STANDARD FOR OVER 100 YEARS

CHERRY RED SHADES
Light, Medium and Deep

ORANGE SHADES
"Hercules" Repoline • "Hercules" Casiline

VEGETABLE LIVERWURST COLORS

Send for our new Atlas Food Color Guide and Price List. It contains important information for food processors.

FIRST PRODUCERS OF CERTIFIED COLORS

H. KOHNSTAMM & CO., Inc.

ESTABLISHED 1851

89 Park Place, New York 7 — 11-13 Illinois Street, Chicago 11
2632 East 54 Street, Huntington Park, California

Branches in other principal cities of the U. S. A. and throughout the world

Italian Meats

★ **Italian Style Loaf**

Something new! Gold Medal Italian Sausage made from ham baked in loaf form. Try it . . . fry it. It's delicious.

★ **Prosciuttini**

"The Little Prosciutti." The original Pepper Ham. Vigorously seasoned to perk up tired appetites.

★ **Capicola**

Genuine Hot Ham. A Gold Medal original. Boned, tender ham . . . highly spiced . . . really hot. A favorite everywhere.

Gold Medal

Packing Corporation

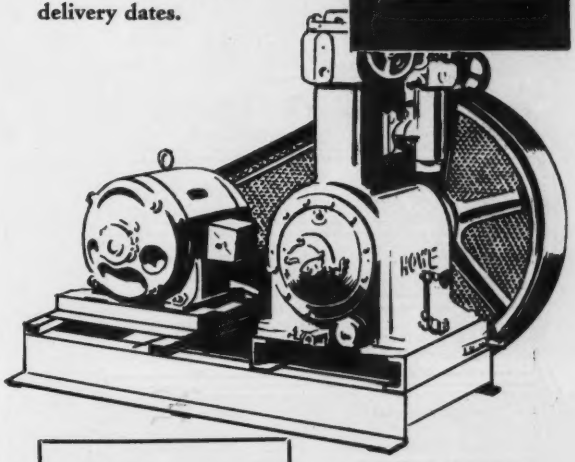
UTICA, N. Y.

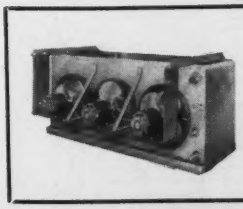
U. S. INSPECTED — EST. 377

HOWE

refrigeration components!

HOWE'S factory facilities are especially set up to produce the custom-order fabrication of quality refrigeration components. Correctly engineered to your individual plant, they assure highest efficiency with lowest cost operation. Howe's shop flexibility gives you volume prices on small quantities, with firm delivery dates.





HOWE 3-FAN UNIT COOLERS

For heavy duty, high tonnage blast freezing and freezer storage of food products.

HOWE ICE MACHINE CO.

2823 Montrose Avenue • Chicago 18, Illinois

Distributors in Principal Cities, Cable Address HIMCO Chicago

What's The Matter With Meat Selling?

[Continued from page 138]

authority to cut price. That's a wonderful step in the right direction. There is nothing more demoralizing to a salesman than to be conscious that someone else has the last word on what he is selling.

PERHAPS YOU NEED BETTER MEN: We put in the qualifying word "perhaps" because a very good proportion of your current men have the potential to improve, but you will have to work on it.

In any case, now or later, you will need better men to cope with the more powerful buyers you will be facing. I suppose it's "old hat" now to predict that you may be selling 70 per cent of your output to perhaps 100 buyers. Almost every day you read reports on the merger trend in the food field.

The point remains that you are going to need men of higher calibre. In this connection there are two or three facts that came out in the field check that deserve your attention. It's a basic premise of good hiring that you can afford to hire only the best man available to you at what you can pay. To get better men you're going to have to go out after graduating college seniors. I can tell you that the companies you're competing against have very aggressive college recruiting programs.

We were called on to develop the Pure Oil Company's college recruitment program. We were amazed to discover that more than 1,500 companies had very aggressive recruitment programs. These programs consist of handsome brochures describing the company and its activities, use of trained interviewers, contacts with professors and sources as elaborate as baseball scouting.

Today, you make appointments with juniors. You must sell them on your company and a job a full year before they're going to be eligible. Selling them isn't easy; their demands are high. Fortunately for our little company, one of the most consistent requests is whether you have a planned training program.

How do you go about getting better men? Set a

FACTS ABOUT PACKER SALESMEN

SALESMAN'S AGE

1 Per cent	20 years or under
20 "	21 to 25 years
27 "	26 to 30 years
22 "	31 to 35 years
15 "	36 to 40 years
15 "	over 40 years

MARITAL STATUS

10 Per cent	Single
18 "	Married, no dependents
72 "	Married, dependents

EDUCATIONAL BACKGROUND

4 Per cent	Some high school
62 "	High school graduate
19 "	Some college
15 "	College graduate

HOW WAS SALESMAN RECRUITED?

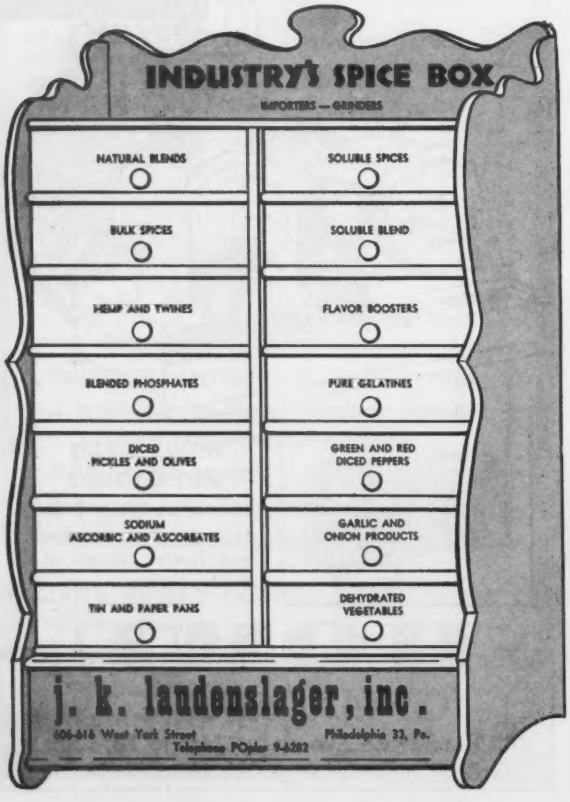
3 Per cent	Employment agency
4 "	Ad in newspaper
10 "	By present salesman
50 "	Man applied himself
8 "	From a customer
5 "	From your file of applicants
17 "	Other

SALESMAN'S LAST JOB

33 Per cent	Selling for other packer
29 "	Selling, not in meat industry
30 "	Non-Selling job
8 "	No previous experience

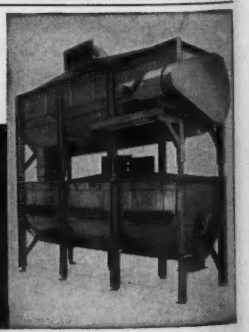
HOW MANY APPLICANTS WERE CONSIDERED BEFORE HIRING THIS MAN?

High	40
Low	1
Average	2½



PHILADELPHIA
BONELESS BEEF CO.
Specializing in Quality Packaging
FRESH AND FROZEN
BEEF CUTS • TENDERLOINS • PACKINGHOUSE PRODUCTS • SAUSAGE MATERIALS
LEAN BEEF FOR HAMBURGER
Phone: MARKET 7-0344 | 223 CALLOWHILL ST.
U.S. Govt. Inspection Est. 13 | PHILADELPHIA 23, PENNA.

FRENCH
FEATHER MEAL DRYER
- More marketable product with light uniform color
- Outstanding operating economy
- Reduces drying time
- Eliminates scaling problem
- Reduces odors
- Saves floor space



THE FRENCH OIL MILL MACHINERY CO.
PIQUA, OHIO U.S.A.

goal of the number of more effective men you will want by a certain year. Determine how many of your present men have the potential. Plan a program of progressive development for each of them. Go out after the remaining number you will need. Set up some form of regular college recruiting. Get to know the men who teach selling and marketing and business administration and liberal arts to the juniors. Tell them what you need in the way of intelligent sales manpower.

When talking to prospective applicants, make the job attractive to them. Offer a starting wage competitive with what other companies are offering. And, if you have one, sell them on your training program. Compete! It's the only way to get good men today.

Well, let's see what we've covered. We tried to suggest at the beginning that the need is urgent to do something about your salesmen . . . to help them compete more effectively in today's food marketing world.

We suggested first that you do something to give your men, constantly, a form of selling excitement—a new product, a new package, a new promotion, a new program—something new and different to talk about periodically to develop new selling enthusiasm and buying interest in the dealers.

Next, we suggested that your men can profit from better training in the areas of product knowledge, selling techniques, and merchandising. The men need it, they want it, they will make good use of it.

Third, we suggested your men can profit from better supervision, including more frequent work-withs conducted by the sales manager, better sales meetings and some home office support on price lists.

Finally, we suggested you might want to start planning now for the better and more capable men you're certainly going to need in the future.



ENJOYING a moment's relaxation are W. C. Crew (left), Denver Union Stockyards, Denver, Colo., and A. Z. Baker, American Stockyards, Association, Cleveland, O.

What's the future of meat packer salesmanship? If you begin doing something about each of these requirements back in your company this week, then the future is very bright for you!

Remember, your men are up against a newer and tougher kind of competition, and they will need your help before they can give you maximum performance.



SOME OF THOUSANDS who attended the fifty-third annual meeting of the American Meat Institute are shown milling about in the lobby after the close of the packed sausage session on Saturday, September 27. The program of fewer, but more intensive meetings, proved popular with conventioneers. Suppliers reported that good interest was shown in the exhibit halls this year.



THE AMI STAFF, minus a dozen or so who dedicated themselves to "carrying on" the convention activities while flash bulbs lighted. Several of the girls have many years of service—one with 33 years and she remembers when there was a hitching post in front of the building. Two of the AMI officers in center rear couldn't prevent a smile that broke through. They had it coming, as the convention with its months of planning came to a formal close five minutes before this picture was snapped.

Provide Packers With Some Distribution Puzzles

Panelists Gray, Musser, Lavin, Townley and Smith, with speakers Barton, Nielsen and Kielty, develop some new ideas on sales.



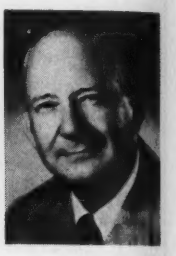
R. F. GRAY



C. MUSSER



O. B. SMITH



F. TOWNLEY

CHAIRMAN R. F. GRAY: We are going to take about 30 minutes for a question and answer session. We are going to start the ball rolling by letting the discussion group ask some questions of the speakers we had this morning. The members of this discussion group are O. B. Smith of The Wm. Schluderberg-T. J. Kurdle Co.; Arthur Lavin of The Sugardale Provision Co.; F. J. Townley of Swift & Company, and Charles Musser of Wilson & Co. These gentlemen are experts in the selling field. I am going to start with Mr. Lavin. Do you have a question we can use to begin this session?

ARTHUR LAVIN: I have a question for Jack Kielty. How do you feel packers can adjust to the rapid change that has been made in retail distribution with buyers who want to by-pass salesmen?

KIELTY: The other companies with whom we work are setting up precise procedures for their salesmen to follow. They give each of their salesmen and beginners one or two of these accounts, smaller direct houses, but they keep all of their salesmen constantly in contact with them. That is, they do not separate salesmen and vice presidents, so to speak, in contacting such accounts. They teach men from the very beginning to learn to deal with these accounts.

O. B. SMITH: Mr. Kielty, I have a question for you. What can the packer do now to improve his sales and profit position, and how can he go back and do a better selling job next week?

KIELTY: Well, again, I retreat into my defensive position and tell you what the other people with whom we work do. Top management establishes a price list, and that is the price list, and there is no deviation from it by salesmen or anyone else.

Mr. Nielsen discovered that the meat salesman is disliked, or doesn't enjoy high regard, because his list is shifting all the time. The buyer can't be sure what the price is.

General Foods, Campbell Soup and even Birdseye salesmen have firm price lists established from top management on down. We also believe there should be more rigorous control of what the salesman does. Management should decide what his territory is, what accounts he calls on and how he spends his time. Management should decide where he is to concentrate his merchandising ability and so on.

CHARLES MUSSER: I am afraid we are picking on Mr. Kielty. I have one I would like to ask him. You said that we need selling excitement in the form of new products and new packaging.

We have two people we must sell. We get our product into the leader stores, but we must get Mrs. America to buy. What effect will it have on her when we change our packages often, and how much will we have to spend in advertising to get her to recognize them and avoid losing the family resemblance in packages?

KIELTY: I can only tell you what our experience has been and what the salesman needs for an effective selling job. We know that when he gets something new regularly, he sells it with more enthusiasm.

I think I will have to ask Mr. Nielsen to answer what happens in the store.

NIELSEN: It seems to me that Mr. Kielty made a good point in trying to develop things which give the salesman something to talk about on his calls.

However, I would like to remind all of us that, according to a recent study made by Marian Harper of McCann-Erickson, two out of three new product ideas fail. So, while it is important to give the men something new, we should give them something new that works, to be sure that their reception will be good on the second or third call. Don't load the customer with something that doesn't move off the shelves. I think that is where you can take advantage of the newer techniques for evaluating product change or package change in a small area. Test it out, find out what the



THE CROWD outside the grand ballroom on Saturday morning.

best method is and whether it works, and then give it to the salesmen.

F. J. TOWNLEY: I have a question for Art Nielsen. You suggest that the packing industry contribute 5c per hundredweight on sales. This amounts to approximately $14,000,000 or $15,000,000 a year. The purpose of this would be to advertise to increase consumption of meat and thereby increase the value and price to potential consumers.

Would you care to comment on how the packer will improve his financial position through this program?

NIELSEN: I think that is a very interesting question, Mr. Townley, and if I understand its implications, I would answer it in this way. I suppose most of the people in this room would like to have plenty of product moving into the market at a low price and with strong buyer demand. We could all make profits in those years. The only trouble is, you don't get too many of those years any more, but you get a lot of the other kind.

I am advocating something I have seen work in at least a dozen organizations which have product problems of the type you have. We believe that you need two marketing tools which you now lack. The first of these is better consumption statistics. In analyzing the figures with which you are working, I believe it could be said that these are more analogous to a motor car manufacturer's data on cars shipped out to dealers. They are not the figures that show what the demand is at the dealer level, or how many cars are actually being sold. We need to improve those statistics. Use of better ones will tend to cut down on the glut situations when true demand is low, and will keep production out on the ranges and on the farms more closely in tune with real consumer demand.

The second thing you need is the advertising program. This advertising budget is really a safety valve, as I see it, which can be turned on when you get a long supply situation to raise the level of consumer demand temporarily, so that prices will remain higher.

There may have to be a little concession on price, but you will move more products through the packinghouse and your profit will hold up better than without the advertising. It has worked out that way for a number of other commodities.

LAVIN: In that connection, do you feel that individual packer advertising has the effect of raising per capita consumption, at least in his own community?

NIELSEN: Absolutely. I am not indicating that the individual packer forego his own support of his own products. There are many things the individual packer can do for himself. But this is something that is really bigger than any individual packer. I think it is an industry program. It can best be done on a broader scale which, over the long run, gradually will increase meat consumption. You won't get results in the first year, and maybe not even in the second, but over a long period of time you will change people's eating habits favorably with respect to the overall consumption of meat.

MUSSER: I would like to ask Mr. Barton about his comments on the eating habits of people. I would like to ask what proportion of meat consumption they found at breakfastime in comparison with dinnertime?

BARTON: While bacon and some of the processed foods are consumed at breakfast, the meal offers an opportunity for growth rather than a large market existing at the present.



A PRETTY FACE always brightens the day and this one is no exception. Lovely lady is Carol Seiden, sales department, Leon's Sausage Co., Chicago, and her companion is M. J. DeBella, salesman, Wilson & Co., Inc., Chicago.

MUSSER: Then are you tying your suggestion into trying to get people to eat steak for breakfast?

BARTON: Quite a few people now eat steak for breakfast. If you could get more of them to do so, it would be good for you. One of the main points is that breakfast may be the only meal eaten at home.

CHAIRMAN GRAY: Here is a question from the floor for Mr. Barton. When we speak of food eaten away from home, what portion of the total food business are we concerned with?

BARTON: I believe in total it is somewhere around 25 to 27 per cent. It varies widely, of course, for indi-



BREAK in a busy day is taken at a luncheon meeting by members of the American Meat Institute accounting committee on Friday, September 26.

vidual commodities and fields and in dollar volume.

CHAIRMAN GRAY: Jack Kielty, are there any limitations as to the size of the sales force that would warrant a formal sales training program?"

KIELTY: No. We have not worked with any company with fewer than 40 salesmen. Thirty-seven to 40 seems to be the bottom size for which they will use our services. I believe any sales manager who has four or more salesmen should have some continuing form of training for them. No matter what the size of the force, there is a need for some kind of training.

CHAIRMAN GRAY: Mr. Kielty, how does the pay scale of meat salesmen compare with the scale of the other companies with which you work?

KIELTY: The meat packer scale tends to be a little lower, not an awful lot, but a little lower. We have found that with college people it is just enough to change their minds and make them negative toward what you offer. If the scale were the same, I believe you would have a better chance of getting them, but because it is a dollar or so lower, they often decide to work for another company.

CHAIRMAN GRAY: Art Nielsen, is the trend increasing to give chain stores an allowance for advertising or featuring a product?

NIELSEN: We studied that question during the last few months. The percentage of advertising allowances being offered hasn't changed more than 5 per cent in the last seven years. It is holding the line.

CHAIRMAN GRAY: Here is another. Aren't we sort of kidding ourselves when we compare our selling too closely with the selling of other commodities? The market fell off $6 on pork loins last Friday, for example. This doesn't happen to catsup or peanut butter.

NIELSEN: That is a short-term fluctuation. I suppose some fellow had a little distress merchandise in a car he had not shipped. I am talking about long-time, seasonal prices, really. These minor fluctuations don't make your market over a long interval.

CHAIRMAN GRAY: Mr. Nielsen, what would be in your opinion a minimum annual industry-wide advertising and promotional budget to do an effective job?

NIELSEN: Perhaps the answer lies in what others are doing. I haven't seen anything less than $1,000,000 to $2,000,000 that generates enough noise to make it worthwhile. You have to get above the general noise level to get enough attention for your products.

I believe that a minimum budget to support meat would be about $5,000,000. I think you would have to spend that much to do a decent job.

CHAIRMAN GRAY: Mr. Kielty, what can we do about the anxiety engendered by fear of our competitors' price cutting?



OPENING SESSION on Friday morning, September 26, finds the grand ballroom thronged with eager and attentive conventioneers.



RED LACQUER ROOM is jammed with conventioneers as they view the many machinery and supply exhibits housed there.

KIELTY: If you are going to be afraid your competitor is always going to cut prices, the greatest danger exists when you believe he has and he hasn't.

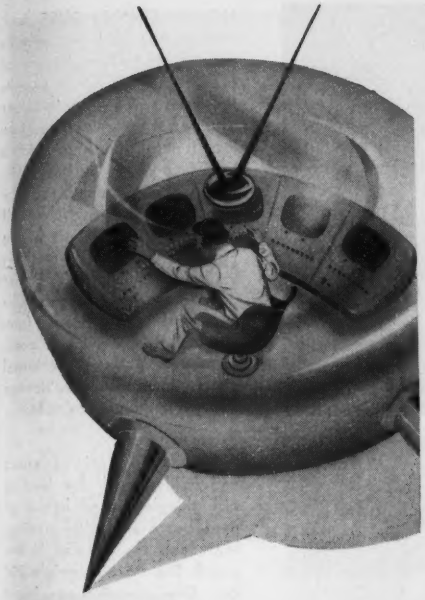
BARTON: This is a very natural kind of a fear. Most companies that we know about have met that kind of a situation by establishing a unique value for their products or services.

I believe, as Mr. Nielsen pointed out, there is a tendency for you think on the production side. Actually, the retailer and the consumer buy more than just the meat item itself. They are buying service,

[Continued on page 177]



HIGHLIGHT of the morning session on Saturday, September 27, was a panel discussion on "How Do We Adjust?" Panelists are seen at the speakers' table. Frank Crabb, minus identifying placard, is at extreme left.



CHANGING PATTERNS

Are Reflected in Machinery and Supplies On Display

Some New Items Are Found by The Provisioner

PACKERS and sausage manufacturers who want to meet the challenge of changing patterns in livestock production and marketing, processing and meat distribution will find that the producers of equipment and supplies are ready to help them with new ideas and devices. That was the conclusion reached by the editorial staff of THE NATIONAL PROVISIONER after touring the 97 exhibits in Machinery Hall and the Red Lacquer room at the Palmer House during the annual meeting. Notable advances in sausage manufacturing, smoking, materials handling, packaging and other operations were foreshadowed by many of the new and modernized items on display. For the first time the AMI supply exposition, directed by John Milton, was housed in the Red Lacquer room as well as the main machinery hall, and both drew crowds.





Some of the new equipment and supply items featured at the exposition are pictured and described on the pages which follow.

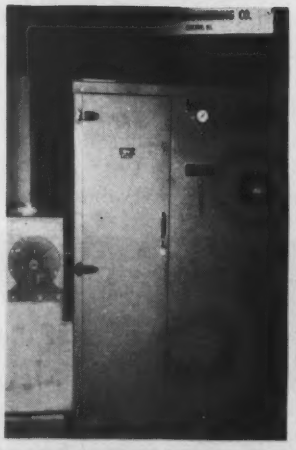
NEW SECOND TIE machine frame is equipped with wheels for movement to stuffing table. When placed next to the stuffer, the unit reduces handling necessary to make the second tie. Unit can also make first tie and gives a positive closure to all types of casings, including cellophane. An attachment permits pressure packing and unit is operated with air at about 60 psi. Metal closures are fed by bayonet-type magazine. Exhibited by Vac-Tie Fasteners, Inc., Elizabeth, N.J.

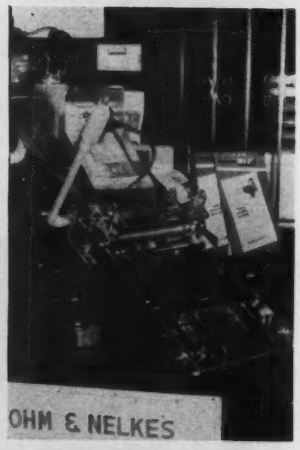




NEW PACKINGHOUSE cooler door has port that permits passage of trolley above door proper. Use of device permits the doors to be lower in height with reduction of refrigeration loss through opening. Port is held in position by spring fingers that are pushed aside by trolley. When door closes it forces insulated padding against upper sill, effectively sealing opening. This lighter door is easier to open. The port's parts are made from stainless steel. Device is available with plywood or metal doors. Jamison Cold Storage Door Co., Hagerstown, Md.

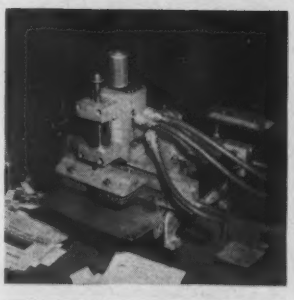
NEW FRICTION SMOKE generator features positive pressure on log to assure uniform density of smoke. Fan draws smoke and, at the same time, precipitates sparks into a water pan. Friction wheel is bearing mounted, reducing the load on 5-hp. motor. Generator will produce sufficient smoke to handle up to 16 cages. Julian Engineering Co., Chicago, Ill., and Meat Packers Equipment Co. of Oakland, California.





MACHINE positions, opens and holds pouch for loading with shingled sliced bacon on paperboard and, after loading, heat seals the opening in the pouch. The machine weighs 250 lbs. One operator can insert and seal up to 1,400 units per hour. When unit is activated, a pouch moves into position, is opened with an air stream and stretched with a yoke. Operator then slides bacon into pouch and pushes it to heat sealing bar. The sealing bar closes the neck and releases the package. Shown by Dohm & Nelke, Inc., of St. Louis.

FORMING MEAT fed by stuffer into molds, the machine can produce patties of 4 x 4 x ¼ in. size as fast as 80 per minute. The unit molds in different shapes and sizes and can form patties up to 1 in. thick. Molds are locked into a fixed capacity displacement chamber to produce different sizes and shapes. Basic Food Materials, Inc., Vermilion, O.

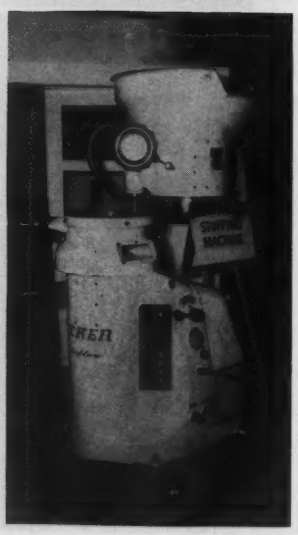




PLASTIC BIN is designed for handling meat products and measures 48 in. x 41½ in. x 46⅜ in. and holds about 2,200 lbs. of product and curing pickle. Vats have rubber foot pads and can be lifted by industrial fork trucks. The empty bins weigh about 135 lbs. and are equipped with capped drain plugs. Shown by Goodyear Aircraft Corp., Akron, O.

AT END OF EACH PISTON stroke in this unit the motor stops and prevents dicing knives from burning meat particles in the base of feed cylinder. Unit has two feed cylinders for simultaneous loading and cutting. If hard material is introduced into feed cylinder, the motor stops when this material comes in contact with the knives. Cutter base and feed piston are powered by a 3-hp. motor. The unit cuts meats into cubes ranging from 1 in. to ⅛-in. in size and also strips or slices. It has a rated capacity up to 3,000 lbs. per hour. Exhibited by Koch Supplies Inc., Kansas City, Mo.

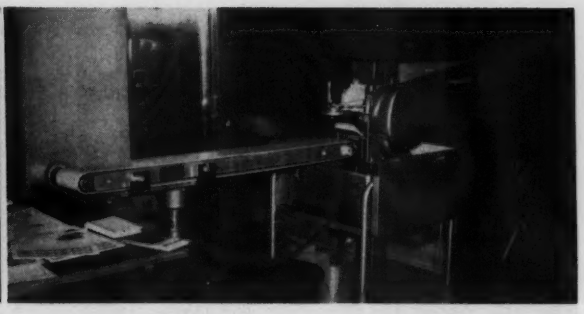




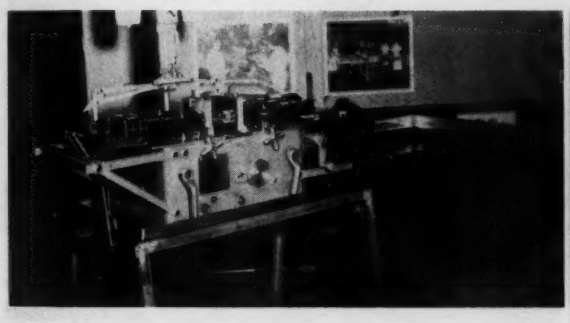
COMPLETELY RE-ENGINEERED continuous stuffer meets the demands for faster output—to about 200 lbs. per minute. Unit has a large hopper which can be loaded by overhead buckets. Vacuum pulls meat mix into impeller section where meat is pushed into stuffing horn. Stuffed product is air-free and compact, reducing casing consumption. Machine has two stuffing speeds. Motor and pump sections are fully enclosed for splash protection. Shown by The Globe Co., Chicago, Ill.



HEAVY DUTY MACHINE is designed especially for slicing dried beef and cuts to thicknesses ranging up to 1/8-in. Blade operates at 1,000 rpm. Individual spring fingers that adjust to contour of meat hold dried beef in place. Machine parts in contact with meat are made from stainless steel. Unit is driven by a 5-hp. motor. A self-honing device mounted in the blade housing is locked in or out of position with a simple twist of the wrist. U. S. Slicing Machine Co., Incorporated, of La Porte, Indiana.



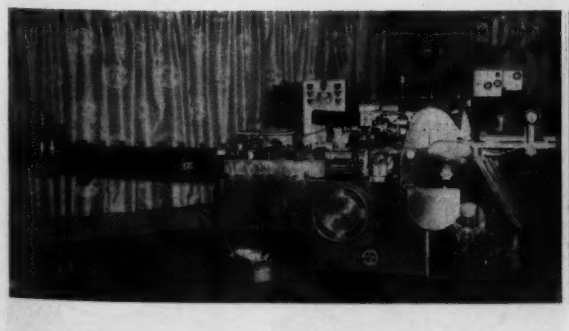
TAKEAWAY CONVEYOR and counting mechanism on patty forming machine can be set to stack patties from one to 10. Machine automatically feeds paper between each patty; belt carries stacks to packoff stations. Machine can mold up to 2,100 patties per hour, forming them in various sizes and shapes ranging in weight from 1 to 5 oz. Molding forms can be quickly interchanged. Patty forming machine is powered by 1/2-hp. motor while another small motor operates conveyor belt. Hollymatic Corp. of Chicago.



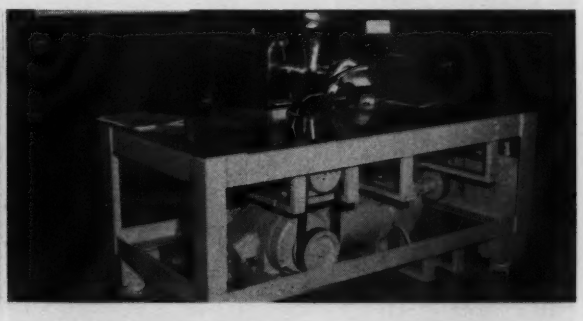
PULL THROUGH BELTS on linking machine have been redesigned to hold link length to greater uniformity and simplify making weight by link count. The machine can be adjusted to produce links of any length and handles any diameter of casing. Machine links up to 114 links per minute. Unit is simple to operate from an electrical plug-in. Linker Machines, Inc., Newark, N. J.



SECOND TIE MACHINE will make closure on any type of film, stockinette, etc., when fed from revolving magazine. Air at 60 psi. powers the unit which has a pressure adjustment that tailors the crimp to the size and type of material being closed. Table model can be moved easily; magazine holds 500 clips. The unit is made from stainless steel. Kalematic Machine Corp., Brooklyn, N.Y.



DESIGNED TO PACKAGE frankfurts the machine will overwrap up to 75 packages per minute. Unit will wrap an odd count, such as five or nine; machine can handle standard films, such as cellophane, Pliofilm, Polyflex and Saran. Infeed conveyor has 12 stations for coordination with product flow from peelers. Machine will seal packages from 4 to 6 1/4 in. in length; 3 to 4 1/2 in. in width and 5/8 in. to 2 in. in height. Front end of machine feeds cardboard onto line and operators stack franks in desired count in either one or two tiers. Exhibited by the Wrap-King Corp., Holyoke, Mass.



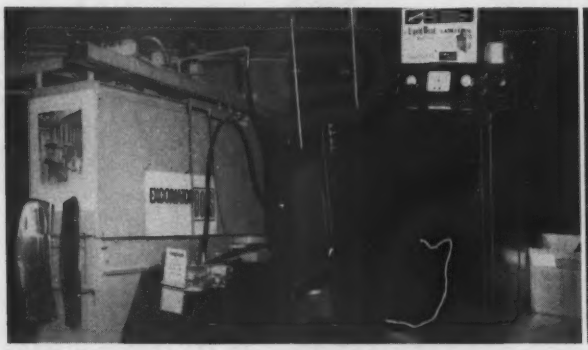
PROTOTYPE UNIT represents a concept of flow handling in producing sausage from grinder to stuffer. Model has grinder, comminutor and pump for forcing product through stuffing cock to produce 1,200 lbs. per hour. Meats are moved from grinder to stuffer horn with a 2° F. temperature rise. The comminutor produces a very fine emulsion and product is firmly stuffed. Projected unit will batch mix ground meat, feed to comminutor, to mixer and to stuffing cocks. Pavia Process Inc., Washington, D. C., and Master Spline Tool & Gauge Co., Livonia, Mich.



TWO INTERCONNECTED UNITS pictured at left work together to weigh, price and print labels for packaged meats. Scale weighs from 0 to 24.99 lbs. and prices up to $1.99 per pound. The label printer, which is in the lower portion of the second unit, prints a label carrying the product name, packer, grade and other information. Capacity of device is 30 packages per minute. Units can be inter-connected with calculator. Hobart Manufacturing Co., Troy, Ohio.

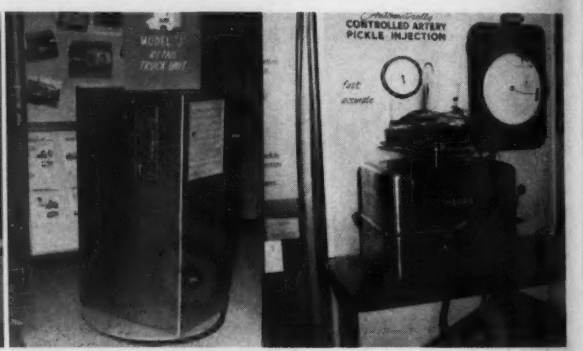


THE LIGHTWEIGHT ALUMINUM tote box is a reusable shipping container for packaged and loose packinghouse products. The unit holds 100 lbs. Handles act as supports when boxes are stacked in a delivery truck; empties can be nested. There are no corners or crevices and box is easy to clean. Manufacturer furnishes a system for keeping track of tote boxes. The Aluminum Cooking Utensil Co., Inc., New Kensington, Pa.



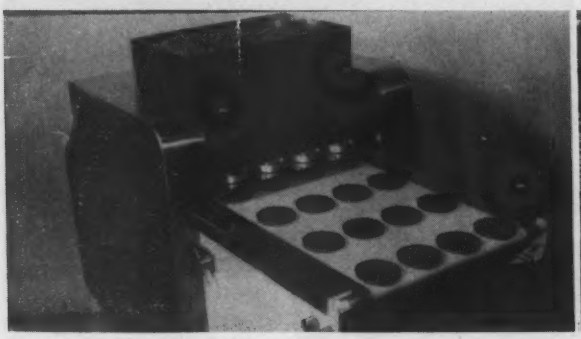
HIDE PULLING machine has a maximum pull of 54 in. The carcass is placed against the saddle-shaped front. The hide is inserted into the grippers on the free-swinging arms on each side of the unit and the pulling operation is controlled by push buttons. Cincinnati Butchers' Supply Co., Cincinnati.

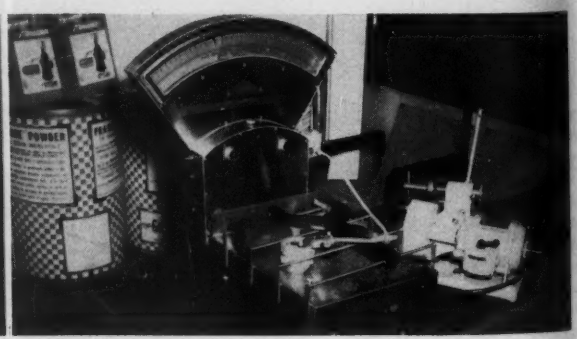
SMOKE GENERATOR uses liquid wood to produce a uniform volume of smoke. Liquid wood is sprayed into gas-heated chamber and is converted into smoke. The supply tank holds enough liquid wood for a day's operation and can produce enough smoke for 30 cages. Atmos Corp., Chicago.



DESIGNED FOR SMALLER VEHICLES, the unit weighs 350 lbs. and provides automatically controlled mechanical refrigeration. The unit is installed in the truck body and outside louvered body panel can be removed. Thermo-King Corp., Minneapolis, Minn.

AUTOMATIC HAM PUMPING machine is operated completely by air. The ham is placed on scale, the needle is inserted in the artery and the machine pumps to the pre-set percentage. The unit weighs 55 lbs., measures 19 x 21 x 15 in. and requires a minimum air supply of 33 psi. It will handle hams up to 25 lbs. Calgon Co., division of Hagan Chemicals & Controls, Inc.





NEW PATTY-FORMING machine simultaneously forms four units at rate up to 120 pieces per minute. At the hopper's bottom, rotating feed arm propels the ground meat into the cavities; molding plate then moves forward under the push-out arm that deposits the patties on a traveling belt. Machine's metal parts are stainless steel. The former can be cleaned quickly and is simply constructed for maintenance economy. E. W. Bridge Co., Palmyra, N. J.

NEW ELECTRONIC COMPUTING pickle pumping scale can be pre-set to pump any desired percentage of pickle into ham. The percentage desired is set on the control device mounted on back of scale; the ham is placed on the scale and the needle is inserted into artery. The scale then automatically pumps in the pre-set percentage. Using two machines, operator can ready one ham for pumping while other is being pumped. The Griffith Laboratories, Inc., Chicago.



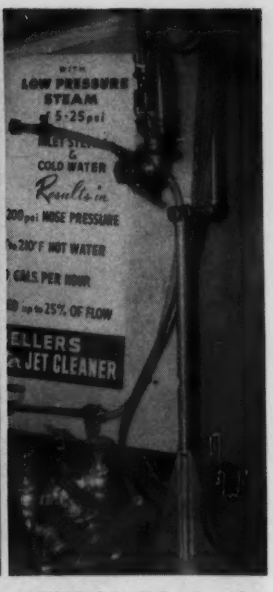
VACUUM packaging and sealing machine has self-contained vacuum pump. Machine will seal pouches up to 11½ in. x 22 in. and weighing up to 5 lbs. at 15 packages per minute. Unit dimensions are 53 in. x 17 in. x 17 in. Royal Packaging Equipment, Inc., of Fort Lee, New Jersey.



NEW CONTINUOUS stuffer uses a centrifugal principle to force meat into strand held on stuffing horn and will stuff 3,600 lbs. per hour. The centrifugal force compacts the meat and forces out the air which is vented on underside of stuffer head. Standard size stuffing horns can be locked quickly into position. Stuffer is powered by a 3-hp. motor. Townsend Engineering Co., Des Moines, Ia.



NEW PORTION feeder dispenses stuffer-fed meat mixes into pouches or bags in weight units from 1 to 36 oz. Feeder has a calibrated set screw that reads in ⅛-oz. increments; rapid adjustments can be made. Unit can be operated by hand or with an air attachment. Phil Hantover, Inc., Kansas City, Mo.



ROTOR SPRAY heads make a full 360° sweep in two planes—vertical and horizontal. Air-driven motor operates from pressures as low as 5 psi. The unit is ideal for cleaning tank cars and tanks. The cleaner weighs 38 lbs. Sellers Injector Corp., Philadelphia, Pa.



A NEW HARD steel knife is designed for mechanical emulsifiers. Upper knife has a tooth edge for rough shredding while the bottom knife is for fine cutting. Knives can be removed quickly for sharpening. Exhibited by Speco, Inc. of Schiller Park, Ill.



CARCASS BRANDER produces clear, non-smear imprint of brand and/or name legend. Ink is picked up by roller pad from reservoir and transferred to engraved roller. Deep engravings penetrate meat to produce a clear legend. Reservoir easily removed for cleaning. Brander repeats 1- to 3-line legend. Handles available in 9-in., 12-in. or 24-in. lengths. Everhot Mfg. Co., Maywood, Ill.



ABOVE LEFT: New bolt type cattle stunner features automatic retraction of the protruding bolt. Cartridge provides positive force for stunning. Remington Arms Co., Inc., Bridgeport, Conn.

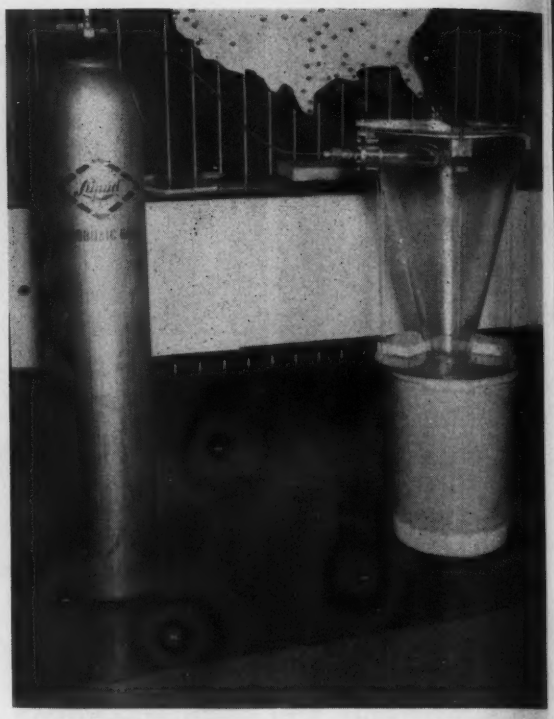
ABOVE RIGHT: Multicolored foil background on label adds reflective glitter to metal meat can. Labels are scuff and moisture resisting. Milprint, Inc., Milwaukee, Wis.



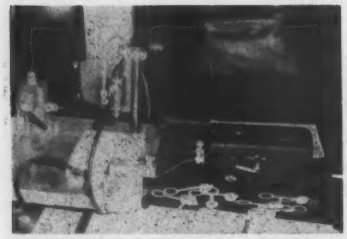
ROTATION of cutting knives on new mechanical hide knife is achieved by a camming action. A beginner soon learns to use knife in a back and forth stroke. Machine is lightweight and can quickly be disassembled for cleaning. Best & Donovan, Chicago.



A NEW MOVABLE SALT dissolver is made of corrosion-proof plastic. The level control chamber is located outside of the vat; water is admitted through plastic piping located about midpoint, while the brine is pumped from the bottom draw off device. The 36 in. diameter model furnishes brine at rates up to 1,200 gal. per hour. International Salt Co., Scranton, Pennsylvania.



PLASTIC CONE FUNNEL is used to convert carbon dioxide gas into dry ice flakes. Cone can be mounted anywhere so flakes will fall into grinder. The ice is formed only as needed. Capacity of converter is up to 3,000 lbs. of flake ice per hour. Converter was displayed by Liquid Carbonic Co., a division of General Dynamics Corp., Chicago.



ELECTRONICALLY controlled unit sprays a predetermined level of ascorbic acid-type solution on product as it passes spray nozzle. Spraying cycle is controlled by micro switch and timing device. Unit can keep pace with any volume of sliced, shingled or stacked product. Unit sprays only when product is under spray head. Exhibited by the Morton Salt Co., Chicago.

Flashes on suppliers

W. R. GRACE & CO.: Two changes in the sales organization of the Cryovac division have been announced by JOHN BIDWELL, eastern division general manager. WILLIAM H. SQUIRE, as sales development manager, will direct product development, technical sales and sales promotion. RICHARD H. BURNHAM will succeed Squire as sales promotion manager. Both will be located at eastern division headquarters in Simpsonville, S. C.

WALLERSTEIN CO., INC.: This New York manufacturer of enzymatic products for industrial use, announced the acquisition of a British affiliate, WHEELER & HUISKING, LTD. of London, importer of crude oils, drugs, spices, essential oils and chemicals. Purchase of the British company, according to ARTHUR C. EMELIN, Wallerstein president, is in line with the decision of the company to expand its overseas operations, particularly those located in Great Britian and on the Continent.

LIQUID CARBONIC DIVISION: This refrigeration unit of the General Dynamics Corp. announces that it has moved to new quarters at 135 S. LaSalle st., Chicago 3. The telephone is FInancial 6-8181.

THE KVP CO.: REGINALD HILLS, formerly western sales manager of this Kalamazoo paper converter firm, has been selected manager of the company's Chicago office. He succeeds J. FRANK EATON, who is retiring after 36 years' service. Eaton has spent 18 of these service years as office manager in the Chicago office.

AROMIX CORP.: PAT KINDER, general sales manager of this Chicago seasoning firm, has announced two additions to the sales staff and one to the engineering unit. ALAN MCCULLOUGH and CHARLES HUTCHISON have been given sales territories, and JACK SURIANO will be in charge of the firm's research laboratory and product development.

OAKITE PRODUCTS, INC.: GEORGE M. SEIB, formerly secretary of this New York industrial cleaning and metal treating compounds firm, has been appointed vice president. ERWIN H. STEIF, who was Seib's assistant, has been promoted to the post of secretary.

AMERICAN VISCOSE CORP., FILM DIVISION: CHARLES R. SHAFFER has been appointed a special representative attached to the firm's New York district sales office, according to VIRGIL N. WINKLER, district manager. Shaffer was formerly head of film division's advertising in the Philadelphia headquarters.

Fifty-Year Veterans

Here are short biographies of veterans who have given a half-century of service to the meat industry. Alan J. Braun, vice president of The Braun Bros. Packing Co., presided at an AMI breakfast in honor of the vets and presented each of the senior citizens with an AMI gold badge.

THE Institute is privileged to be host at this convention breakfast honoring one woman and 39 men who have each given a half century and more of service to the meat industry. Each of these people, whose industry careers began at approximately age 15, has devoted a useful lifetime to an industry which returns the largest single amount of income to the American farmer, and which provides the American consumer with his basic food. Few industries in the United States are in a position to welcome to the ranks of 50-year veterans a number as substantial as those who have become eligible this year to receive the gold emblem.

The 50-year veteran of any industry is becoming increasingly rare. When these veterans started their careers, many companies employed youngsters of 14 and 15. Furthermore, the average company did not have a retirement program effective at age 65. Developments in the industry would indicate that in a few more years the 50-year veterans of any industry in this country virtually will disappear, since now, because of schooling and for other reasons, few boys of 15 go to work, and more and more companies are adopting a policy of retirement when the worker reaches his 65th birthday.

Since the Institute started its program of recognizing veterans in our industry, 1,713 individuals have qualified for the right to wear the gold pin or badge. The number



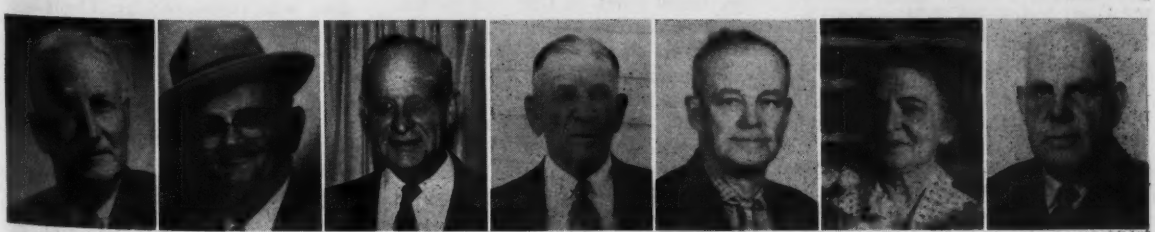
J. ZOELLER | D. McCREADIE | D. EGGERS | W. NYQUIST | E. BERGSTROM | F. PULLEYBANK | G. COOK



R. BARRON | J. KLATT | IRA SMITH | J. LUEBKE | W. MERCER | H. FRANK | T. ANDERSON



H. SWIFT | C. JOHNSON | H. RAY | H. PEET | W. GREATREX | C. BISCHOF | C. WISSEN



E. HOLMES | E. FOLAN | C. GARDNER | H. BOYD | H. GRANT | M. JANKOUSKI | J. CHARLTON



F. UNSINGER H. BAKER W. ADAMS A. ROBERTS BOB JAGITSCH JAMES WEISS C. SMITH

includes both men and women. In addition, nearly 60,000 people in our industry have been awarded a silver button or pin, representing 25 years of service to the meat industry.

This year's list of honored veterans covers employes in every category of service. My father received his 50-year gold service emblem three years ago at the Institute's convention. The list includes many persons who were born in another part of the world and who came to the United States to live useful lives as employes of one of America's most important industries.

We, the American Meat Institute, speaking for our industry, welcome you to the ranks of honored veterans of our industry. May you, who from now on will wear with honor the gold button or pin as you draw near the completion of your span of service to our industry, take with you as you go the profound appreciation of your company and your industry for a half-century of devoted service to the industry and to the public.

(Pictures of many of the 50-year vets are shown, and brief biographies of all vets honored this year are printed in adjoining columns.)

BILL ADAMS, The Cudahy Packing Co., Seattle, Wash., began his industry career in the shipping department of Frye-Bruhn Co. Frye-Bruhn Co. later became the Chas. H. Frye Co. Adams rose to receiving clerk, shipping clerk, assistant manager of the beef department, and finally was made branch house manager at Tacoma, a position he held for 20 years until the branch was closed. The firm was purchased by the Seattle Packing Co., and later by Cudahy.

TED ANDERSON, Swift & Company, Chicago, started with the company in 1908 as a messenger in the Kansas City, Kan., office. He later came to the Chicago general office. He now holds a position in the personal accounts division.

HARRY BAKER, Sierra Meat Co., Fresno, Calif., started in the retail end of the industry in 1906 and worked at various markets and packing plants on the West Coast before joining Sierra in 1946. Soon he was made secretary-treasurer of the company and vice president of Sierra Rendering Co. in 1956. He holds both positions at the present time.

ROBERT HARRY BARRON, Armour and Company, Ltd., a subsidiary of International Packers, Ltd., London, England, began his half century in the meat industry as a office clerk with Morris Beef Co., Ltd., England. After service in World War I, he rejoined Morris, eventually taking charge of the disbursement department. He continued in this position when the company was purchased by Armour in 1929 and in 1944 he was transferred to the financial department, where he is working at present.

ELMER J. BERGSTROM, Geo. A. Hormel & Co., Gig Harbor, Wash., began his career in 1905 in the retail meat business. In 1937, he joined the Seattle branch of Hormel, where he worked as a salesman and collector until his recent retirement.

MICHAEL BERKERY, Agar Packing Co., Chicago, began his industry career in the livestock end of the business as an employe of the Sam Keating Commission Co. in 1906. Two years later he joined the livestock department of the Bismarck Packing Co. Berkery moved to the Western Packing Co. in 1910, where he was given special guidance in hog buying by James S. Agar, president of the company. He is now head of the livestock department of the Agar company, a position he has held almost all of the 45 years he has been with this well-known pork packing company.



M. BERKERY

CHARLES E. BISCHOF, Krey Packing Co., St. Louis, Mo., began work with the company in 1908 at the age of 20 years. In that year he was assistant bookeeper and later was placed in charge of accounting and office management. He became secretary, assistant treasurer and director in 1930, the positions which he is holding at the present time.

HAROLD L. (TOBE) BOYD, John Morrell & Co., Sioux Falls, S. D., started as a laborer for Morrell in Ottumwa, Ia., when he was 13 years old. Later he worked with other companies in the meat industry. In 1921 he became a butcher at Morrell's Sioux Falls plant, where he remained until his retirement in May of this year. His son, William, is employed in Morrell's hog kill department.

JOHN HENRY CHARLETON, Armour and Company, Ltd., a subsidiary of International Packers, Ltd., London, England, joined the Liverpool branch of the Armour firm as a junior clerk. He served in World War I and later worked in various office departments until 1932 when he was transferred to the head office in London. In 1940 Charlton took over management of the invoice department, a position which he now holds.

GEORGE W. COOK, The Klarer Co., Louisville, Ky., went to work for the Dold Packing Co., Buffalo, N. Y., when he was in his teens. He gradually worked his way up until he was in charge of the beef department. In 1913 he went with The Cudahy Packing Co. After service in World War I, Cook returned to the Dold firm and remained until 1925. Then he accepted a position with Wilson & Co., Inc., Chicago. In 1935 he went to the Emmart Packing Co., Louisville, where he eventually became president. Last year, when the Emmart firm was purchased by The Klarer Co., Cook went into semi-retirement, but serves the company as a director and consultant.

DR. DAVID F. EGGERS, Bear Lake, Mich., has completed 50 years of federal meat inspection service. Upon leaving McKillip Veterinary College in Chicago, Eggers was appointed veterinary inspector in that city. He has worked in various other cities

during his career, including Sioux City, Ia.; Richmond, Ind.; Bristol, Va., and Chattanooga and Nashville, Tenn. In 1934 he served as supervisor or inspector in charge in various areas. Dr. Eggers retired briefly in 1953, but his love of work led him to apply at the Florida Livestock Board, where he continued his career as inspector until recently.

EDWARD FOLAN, Geo. A. Hormel & Co., Austin, Minn., had his first experience in the meat industry in 1907 and worked with several packing companies before joining Hormel in 1933 in the beef kill department. He has worked in many departments of the Hormel company and currently is employed in the engine room mechanic department.

HERMAN FRANK, The H. H. Meyer Packing Co., Cincinnati, O., was first employed by Zellar Packing Co. in 1908 and worked with The H. H. Meyer Packing Co. and The J. & F. Schroth Packing Co. in later years. In 1948 he returned to the Meyer company, where he now is employed as a plant guard for the well-known Cincinnati meat packing company.

CLINTON M. GARDNER, John Morrell & Co., Sioux Falls, S. D., first became interested in the meat industry as a child when his father operated a meat market in Ocheyedan, Ia. He became a helper when he was 14 years old and at 16 was buying and slaughtering animals for market. After acquiring experience in running his own shop in Rushmore, Minn., and later at his father's shop, as well as buying, slaughtering and shipping cattle on his own, Gardner was asked by John Morrell & Co. in 1919 to join the firm. Later that year he was made head cattle buyer and has continued actively in that capacity up to the present time.

HELMUTH GRANT, Swift & Company, Fort Worth, Tex., began his half century of service with Swift in the beef casing department. He was later made oil house assistant foreman, the position he now holds.

WILLIAM EDWARD GREATREX, managing director of Wilson Meats, Ltd., London, England, will have completed 50 years in the meat industry with Wilson & Co., when he retires in December of this year. His career began with the British American Product Co., Ltd., Birkenhead, England, a subsidiary later purchased by Wilson in 1916. In 1923 Greatrex was appointed manager of the firm. He then established units in Australia and New Zealand and was appointed supervisor of these operations in the London office. In 1950 he became managing director of the meat packing firm of Wilson Meats, Ltd.

ERNEST S. HOLMES, president of John R. Daily, Inc., Missoula, Mont., started in the meat industry in 1908 as office manager for the Daily company. In March, 1910, he became secretary-treasurer, and general manager in January, 1928. After the present corporation bought out the Daily company, Holmes was elected vice president and general manager in July, 1930. On March 7, 1939 he became president. Holmes has for many years been a member of the Institute's Board and committees.

ROBERT JAGITSCH, First Spice Mixing Co., New York City, got started in 1907 with Franz Bros., Springfield, Ill., where he worked in all departments. Later he joined E. Goedel, Peoria, Ill., as a salesman. Jagitsch has worked for the Dubuque Packing Co. and the West Plains Packing Co., Missouri. He has been with his present employer since 1947.

MRS. MARGARET JANKOUSKI, Swift & Company, Chicago, Ill., became the first woman employee at Swift to be eligible for the AMI gold 50 year award, and is one of the few women in the entire industry to receive the gold emblem. She started in the soap department in 1908 and remained in that department until the time of her recent retirement.

CECIL JOHNSON, Kingan division of Hygrade Food Products Corp., Indianapolis, Ind., was first employed as a messenger, He next worked in the hog killing department and has been connected with this department in various capacities since that time. One of his three married daughters works in the dried beef department of the Kingan firm.

P. J. KOWALSKI, Agar Packing Co., Chicago, graduated from grammar school in June of 1908 and the next day started work for the Boyd Lunham Co., holding hog carcasses open for the splitters. Two years later, he joined the curing department, Armour and Company, where he remained until 1921. For the last 37 years, Kowalski has served in various capacities at the Agar company, and presently is a member of the accounting department.



P. J. KOWALSKI

ROBERT J. KAHN, Arthur S. Davis, Inc., New York, N. Y., began his half century of service with National Packing Co. and Armour and Company in New York. In 1913 he went into the brokerage business, forming the firm of Bechstein & Kahn, and in 1920, the firm name was changed to Robert J. Kahn. From 1937 he worked for other companies as a broker until he joined Arthur S. Davis, Inc., where he is employed at present.

JOHN KLATT, Plankinton Packing Co., Milwaukee, Wis., was born in Milwaukee and has spent his working years in the city of the Braves and brew. Klatt began work in the industry with Plankinton as a door tender in 1908. He is now a scaler in the sweet pickle curing department of the Milwaukee company.

E. F. MARTIN, Agar Packing Co., Chicago, started as a messenger boy in 1902 in the Chicago plant of Armour and Company. He served in various capacities for 31 years, later transferring to Agar as a hog test clerk. In later years, Martin was advanced to head of plant accounting and cost department, a position he now holds.



E. F. MARTIN

JOHN LUEBKE, Plankinton Packing Co. of Milwaukee, Wis., started work in the meat industry in 1908 as a door tender. He later advanced to an assistant foreman in the cooler, a position which he held until his recent retirement.

DAVID MCCREADIE, Kingan division of Hygrade Food Products Corp., Indianapolis, Ind., started with the company in 1908. He worked in the store room and paymaster's department and in the bacon slice department until 1915. He was then transferred to the labeling department as a supervisor and remained there until 1931, when he was assigned as a scaler to the tank house. In 1941 he became a scaler in the hog warm offal department, a position he now holds.

W. J. MERCER, The Cudahy Packing Co., Omaha, Nebr., was born in Seaforth, Ontario, Canada, and first joined the meat team in Winnipeg in 1908. He is now a United States citizen and his career in the meat industry—in addition to war service with the United States forces and with Canada—includes several years

PORK
BEEF
PROVISIONS

THE BRAND
Marhoefer
OF QUALITY

MARHOEFER PACKING COMPANY, INC., MUNCIE, IND.; POSTVILLE, IA.

More Profitable Skinning Operations with a Jarvis DEHIDER



* *Greater efficiency on kill floor*
* *Cleaner, smoother hides*
* *More fat on the carcass*
* *Less operator fatigue*



The Jarvis Dehider is a precision power tool — rugged ... safe ... easy to operate. Oscillating blades remove hides without scoring to give you unblemished hides which command top quality prices. All fat is left on the carcass, resulting in more meat, less unprofitable scrap.

Investigate the savings offered by the Jarvis Dehider. Available in either electric or pneumatic models.

Write today for Catalog giving complete data on the Jarvis Dehider.



Jarvis
CORPORATION
MIDDLETOWN, CONNECTICUT

of buying and selling casings in China, Siberia, Holland, Germany and England.

JOSEPH J. NOVOTNY, Armour and Company, Omaha, Neb., began his packinghouse service in the plant in 1906, shortly after arriving in this country from Czechoslovakia. He worked for The Cudahy Packing Co. and Swift & Company for a short time before rejoining Armour in 1923. In 1925 Novotny became a checker in the freezer department where he worked continuously until his retirement on September 1 of this year.



J. NOVOTNY

WALTER NYQUIST, Swift & Company, Omaha, Nebr., was first hired as an office boy by Swift. After working in various pork departments through the years he was promoted to head hog buyer in 1946, a position he held until he retired in May of this year.

THOMAS PERUSSE, The Cudahy Packing Co., Seattle, Wash., began his industry career at the age of 12 in a small custom slaughtering plant in Sunnyside, Wash. During the last 50 years Perusse has worked for a number of meat processors and restaurant and hotel supply firms. Twelve years ago he joined the Serv-U-Meat Co., a subsidiary of the Cudahy company, where he has been employed ever since.

AUGUST PFENNIG, John Krauss, Inc., Jamaica, N. Y., entered the meat business in Germany in 1908; later being employed in Argentina and in Chile. Pfennig joined Merkel's in 1923 and remained until 1934, when he entered the employ of John Krauss and has been employed with this firm in the hog cut and ham boning ever since.



A. PFENNIG

HARLEY D. PEET, chairman of the board, Peet Packing Co., Chesaning, Mich., comes from a family that has been active in the meat industry for years. When Peet Packing was incorporated in 1920, Peet was made president, and the plant has since expanded to three plants and six

branches in Michigan. Peet has devoted many years to membership on the American Meat Institute's board and its committees.

FREDERICK J. PULLEYBANK, Burns & Co., Ltd., Vancouver, began work in a local butcher shop at the age of 16. After five years he moved to Calgary, Alberta, to join the Burns firm. He transferred to the Vancouver plant, where he worked until his retirement this February. During his 44 years with the company, Pulleybank was absent from work only one day.

HARRY M. RAY, general manager, Davidson Meat Co., Los Angeles, Calif., began his meat career by making deliveries for Buckles & Son of Mound City, Kan. He acquainted himself with meat cutting and worked for various other meat companies in Missouri in that capacity. In 1935 Ray accepted a position as foreman of the Davidson meat division of Wilson & Co., Inc., and later was named assistant manager and sales manager of this organization in 1938. In 1949 he was elevated to the position of general manager, which he presently holds.

A. C. ROBERTS, Roberts Packing Co., Kimberton, Pa., started his meat industry career in a country butcher shop in 1919 in Pennsylvania. In 1919 he built a small meat plant in Kimberton, and under his guidance the plant and business have expanded. Roberts is president of the Pennsylvania organization.

HARRY ROESCH, The E. Kahn Sons Co., Cincinnati, O., entered the meat industry in 1902. He worked for the Sander Packing Co. until 1935, when he switched to Kahn. Roesch is 75 years old and has no intention of retiring. Roesch is a salesman and reports that he "loves it."

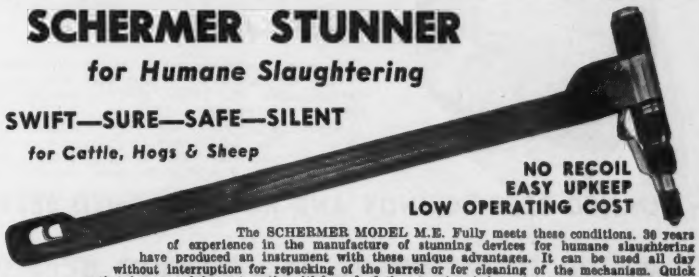
EDWARD E. SEH, Wilson & Co., Inc., New York City, went into the meat business 50 years ago, and was a very young man when he joined the Gotham Hotel Supply division of Wilson. From 1943 to 1947 Seh was manager of the New York plant of Wilson, and he was later promoted to president of the Gotham division and is still active in the direction of the organization.

IRA E. (DIETZ) SMITH began working for Geo. A. Hormel & Co., Austin, Minn., in 1908 in the hog kill department. For 20 years, from 1909 to 1929, he was a member of the wrapping department. From there he went into shipping and became foreman of the market shipping department in 1942, a position which he

FRUCHTBAUM and MAITIN

packinghouse engineers and architects
1231 Sansom St.
Philadelphia 7, Pa.
WAlnut 2-4040

SCHERMER STUNNER
for Humane Slaughtering
SWIFT—SURE—SAFE—SILENT
for Cattle, Hogs & Sheep



NO RECOIL
EASY UPKEEP
LOW OPERATING COST

The SCHERMER MODEL M.E. Fully meets these conditions. 36 years of experience in the manufacture of stunning devices for humane slaughtering have produced an instrument with these unique advantages. It can be used all day without interruption for repacking of the barrel or for cleaning of the mechanism. Quick action is assured by automatic withdrawal of the stunning bolt and automatic ejection of the spent cartridge. More than half a million stunners are in operation in all parts of the world.
WITH OR WITHOUT LONG HANDLE—BOTH HAVE TRIGGER CONTROL
IMMEDIATE DELIVERY—WRITE FOR LITERATURE AND PRICES

ALFA INTERNATIONAL CORP.
118 East 28th St. NEW YORK 16, N. Y.
Telephone LExington 2-9834

PORK • BEEF • LAMB • VEAL
CANNED MEATS
COMMERCIAL SHORTENINGS
NATURAL CASINGS • DRY SAUSAGE • LARD FLAKES

Rath®
BLACK HAWK MEATS
FROM THE LAND O' CORN

THE RATH PACKING CO., WATERLOO, IOWA

Provisioner Binders . . .

Keep your copies neatly in one place, handy for quick reference.

Rigid, stand-up binders constructed for long life. Compact as possible to save space.
Rugged leather-texture finish. Easy locking mechanism that really holds copies tightly in place.
Binders hold 26 issues each. Gold stamped with publication name.

Each $3.85 post paid

THE NATIONAL PROVISIONER
15 West Huron Street Chicago 10, Illinois

IT'S THE TASTE THAT SELLS...

Colonial CORNED BEEF



FEATURING CORNED BEEF AND TONGUES IN

3 DISTINCT CURES

- **DELICATESSEN BRAND** with that extra garlic flavor!
- **MILD CURE** with just a whiff of garlic!
- **PLAIN CURE**

Give your customers what they *really* want—delicious and distinctive corned beef that will build repeat sales. COLONIAL offers a quality corned beef for every taste.

Comparison proves! Let your customer decide. *ONLY* greater volume can build greater profits for you. Your customers will ask for COLONIAL corned beef *by name*—a product that sells and sells again.

CORNED BEEF ROUNDS AND RUMP CORNED BEEF

WRITE OR CALL TAYLOR 9-3909

Colonial CORNED BEEF CO.

137 SOUTH WATER MARKET
CHICAGO 8, ILLINOIS

Frank Style
PATENT RIGHTS RESERVED

STAINLESS STEEL BACON HANGER



A SIZE FOR EVERY REQUIREMENT

ITEM NO.	PRONGS	WIDTH
BH 325	3	2½ In.
BH 435	4	3½ "
BH 665	6	6½ "
BH 880	8	8 "
BH 890	8	9 "
BH 1010	10	10¼ "
BH 1011	10	11½ "
BH 1212	12	12½ "
BH 1415	14	14¾ "

OTHER 'FRANK STYLE' ITEMS INCLUDE:

SAUSAGE MOLDS • SELECTING HOOKS • SMOKE STICKS • "S" HOOKS
STOCKINETTE HOOKS • SHROUD PINS • TROLLEY HOOKS • NECK PINS
RAIL & BAR HOOKS • CHUCK PINS • BONING HOOKS • FLANK SPREADERS

STAINLESS STEEL HOOKS MADE TO YOUR SPECIFICATIONS

Prompt Shipments Anywhere • Contact Your Nearest Dealer Today

G. F. FRANK & SONS, INC.

123-125 BROADWAY CINCINNATI, OHIO

now holds. Smith's son-in-law also works for the Hormel concern in the hog cut department.

CLARENCE L. SMITH, Oscar Mayer & Co., Madison, Wis., first worked with The Cudahy Packing Co., New Castle, Penn., and in 1914 went with the Jacob Dold Packing Co. of Buffalo, N. Y. From 1939 to 1951 Smith was employed by Hygrade Food Products Corp. in Buffalo. He then joined Oscar Mayer & Co. as a salesman, the position he now holds.

HAROLD HIGGINS SWIFT, honorary chairman of the board, Swift & Company, Chicago, began his career in the meat industry in 1907 and worked in livestock buying, the general offices, sales, and other departments to familiarize himself with plant operations. Swift headed the industrial relations department when it was formed and is regarded as the father of the company's present employe relations program. He was elected a vice president and director in 1918; became vice chairman of the board in 1937 and chairman in 1948. In 1955 he was elected honorary chairman of the board.

FRED D. USINGER, president of Fred Usinger, Inc., Milwaukee, Wis., is a son of the founder of the firm. He started work at the age of 20. After working in all departments of the company he became president of the organization in 1932. He is still active in the management of the Milwaukee sausage company, serving as chairman of the board.

JAMES F. WEISS, Punxsutawney Beef and Provision Co., Punxsutawney, Pa., started in the industry in 1908 and has served 50 years with one company. His entire half century of work has been spent in the refrigeration end of plant operations.

CHARLES A. WISSEN, Hygrade Food Products Corp., Newark, N. J., started in the office in 1908 and has worked in every department of the meat industry. He is presently supervisor of peddler and route trucks. Wissen prides himself on the fact that in 50 years he has never been late for work.

JULIUS ZOELLER, Krey Packing Co., St. Louis, Mo., started at the age of 12 in his native Austria-Hungary as an apprentice butcher, and came to the United States when he was 14 years old. From 1910 to 1916 Julius worked for Krey on the killing and cutting floors and also in the sausage kitchen. After working for other companies in the industry, he returned to Krey in 1955, where he is still employed in the company's hog killing department.

NLSMB Again Launches Campaign to Popularize 'Meat for Christmas'

"Our extra business from a special 'Meat for Christmas' display last year amounted to $5,142.16."

This was one of the many statements made by meat retailers in reply to a questionnaire circulated recently by the National Live Stock and Meat Board, Chicago. Main purpose of the questionnaire was to check with meat retailers on customer response to special displays and other merchandising ideas during the 1957 Christmas season. The questionnaire also served to obtain information which the Meat Board will use to advantage in furthering the nationwide Meat for Christmas campaign for 1958.

The questionnaire, sent to a cross-section of retailers who capitalized on the Meat for Christmas promotion idea last year, brought wide response, indicating that the firms approached had seen very successful results for their special Christmas meat displays set up last year.

Carl F. Neumann, general manager of the National Live Stock and Meat Board, said that plans are being rounded out for the 1958 all-industry Meat for Christmas campaign. He reported that the campaign will again be built around the theme: "Give and Serve Meat for Christmas—Always in Good Taste."

National organizations of meat retailers, meat packers, restaurateurs, farm and livestock groups, point-of-sale promotion and service organizations are once again combining their efforts to assure a successful campaign. "But the key to final success is in the hands of all of the individuals throughout the industry—the people in local meat markets, packing plants, livestock growers and feeders, livestock marketing personnel and the operators of eating establishments," Neumann said. "If all of us go to work—through personal contacts, by telephone and by correspondence, and through the civic and service groups to which we belong—we can make Meat for Christmas a by-word among consumers and business firms alike." He urges everyone within the livestock and meat industry to sell the idea to their friends, and to make a special effort to contact business firms that give employe and customer gifts during the holiday season.

Neumann noted that some packing firms are making Meat for Christmas a part of the merchandising activities of their various departments; such as beef and small stock, provisions, canned meats and sausage and ready-to-serve meat, as well as advertising,

Vegex cannot work wonders, but it can make you wonder why a little does so much...

ask for samples

VEGEX Company 175 FIFTH AVE., NEW YORK 10, N. Y.

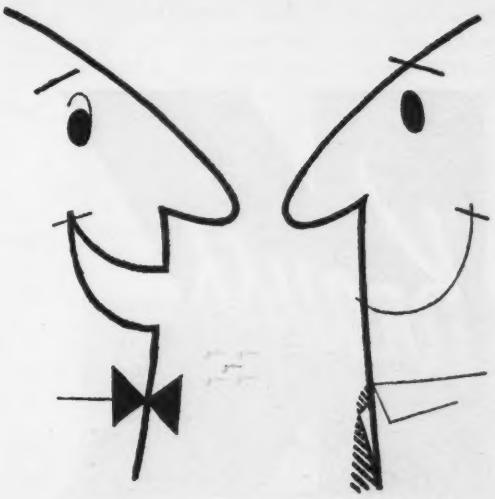
THURINGER CERVELAT

Buy this fine product to complete your line of packaged sausage.

We manufacture this product in artificial casings for slicing.



CHAS. HOLLENBACH INC.
2653 OGDEN AVENUE
CHICAGO 8, ILLINOIS
Telephone LAwndale 1-2500



TALKING ABOUT . . .

a r-r-rough job made smo-o-o-ther, shopping for plant needs in the PURCHASING GUIDE is sure a pleasure. Practically everything you need is there—with all the details.
Any supplier who doesn't put his product information in the PURCHASING GUIDE is missing a sure bet for your purchases.

The finest workmanship and materials go into the manufacture of EVERHOT branding and marking equipment.

Rotary and Lever-Locking Tattooers
Carcass Roller Markers
Ink-Electric Sausage Branders
Electric Burning Branders
USDA Approved Meat Marking Inks

1958 Packers Guide
See page K/Ev

Manufacturers of Meat Marking Equipment since 1920

EVERHOT MFG. CO.
MAYWOOD, ILLINOIS

Krauss
TASTY MEATS

John Krauss, Inc., Jamaica 35, New York

public relations and packaging, in order to assure maximum effectiveness for the campaign.

The Meat Board, in an intensive drive, will carry the message to consumers from coast to coast through newspapers, magazines, radio and television and will provide colorful display material for widespread use.

Streamers in attractive color, furnished by the Board, will be a constant reminder for shoppers in food stores and for the public everywhere to "Give and Serve Meat for Christmas—Always in Good Taste." The streamers also will offer suggestions in the form of full-color reproduction of meat photographs, including porterhouse steak, smoked ham, leg of lamb, bacon, Canadian bacon, standing rib roast of beef, sausage, bologna and frankfurters.

As last year, the campaign has three objectives—1) giving meat products as Christmas gifts; 2) serving meat at home during the Christmas season, and 3) featuring beef, veal, pork and lamb dishes in public eating places during the holidays.

The Board's merchandising specialists suggest that an effective merchandising idea at the retail level would be the use of Christmas tree lights and ornaments as well as display material to call the customer's attention to the special Christmas display of meat throughout the country.

Waterloo to Hold 13th Annual Meat Animal Show

The 13th annual Waterloo Meat Animal Show is scheduled to be held October 15 through 18 in the Hippodrome at the National Dairy Cattle Congress Grounds in Waterloo, Ia. Approximately $5,000 in cash prizes along with swine and beef cattle association special prizes, will be offered to those showing stock.

Sponsors of the show include The Rath Packing Co., Waterloo Chamber of Commerce, Iowa Vocational Agriculture Department, U. S. Department of Agriculture, and numerous other livestock and educational groups in the area.

NRA Contest Winner to be Announced at Convention

The winner of the recently-held National Renderers Association's 25th anniversary contest will be announced November 4, 1958, at the twenty-fifth annual convention of the NRA in Washington, D. C.

The winner of the contest will receive $500 in cash plus a two-week vacation in Cuba for two. Contest was open to all working in or associated with the rendering field.

Discussion on Meat Packer Selling

[Continued from page 162]

confidence, quality and other things from the supplier.

Here is a situation we have encountered many times in our field checks. There doesn't seem to be enough communication between the product buying department and the selling department. In some instances the buying people purchase a lot without even checking, and the selling staff, even if they were good, couldn't sell it. The salesmen are stuck with it.

We have asked them, "Don't you people talk together once in a while and exchange ideas?" Somehow or other, the production end just goes ahead and purchases.

MUSSER: I feel very strongly that it is a matter of teaching. Most salesmen, even if they are bad ones, want to do what is right and I don't think it is a question of fear, but rather a lack of confidence. I believe we must teach them to have confidence in the people who are making the prices. If we teach them to have confidence in their prices, and if we stick together a little more, we will get away from this fear environment.

SMITH: I want to ask Mr. Barton another question. What, in terms of the cost of the product, is Mrs. Housewife willing to pay for built-in maid service? Has your organization determined a percentage she is willing to pay for built-in maid service?

BARTON: The only way to answer that is to carry out a market test. You should carry out these marketing tests at various levels so that you can determine what she is willing to pay. In advance of that, just as



REGISTRATION cards are being filled out (with a little bending) by (left to right) Bob Dedrill, and Earl Saul of Flechtner Bros. Packing Co., located in Fostoria, Ohio.

a theoretical approach, you look first at the economy. Remember that more and more housewives are becoming employed. We would expect that modern housewives of the intelligent type can probably earn at least $1.50 per hour. Approach it from the economic standpoint that her time is worth some money, and maybe in producing a new product you reduce the amount of time she has to spend in shopping or preparing a dish or putting it on the table.

Then, there is the psychological factor. Some people just don't like to work in the home. How much do you feel they will pay to avoid doing something they do not like to do? It is the type of thing on which you are only able to experiment.

TOWNLEY: I would like to ask one more question of Mr. Kielty, who painted a rather black picture of the average packer's route salesman. My question is, do you think we are blaming the right man? Is it the salesman's duty to set up a route? Is it the duty of the salesman to name the price? Is it his duty to determine the size of the order? Is it the duty of the salesman to build up the sales story about the company's product?



TWO LADY conventioneers are testing bracers of Vegex hydrolized protein at the exhibit of the Vegex Company. Dr. Julius Schuelein, president and owner of the organization (hatted) is flanked by his new sales manager, Richard S. Fawcett, and Mrs. Frances Lavender, secretary of the company, and demonstrator at the convention.

This goes back to the question about the fear of competitor's prices. Are we blaming the right man when we blame the salesman for cutting the price?

KIELTY: The evidence we saw in the field points to ineffectiveness on the part of the salesman. However, as I mentioned, perhaps it is the sales manager who should be condemned most. I guess I retreated from that because I assumed there were a lot of sales managers here. Your sales managers don't manage enough. They do an awful lot of price juggling. They spend more of their time in the area of contacting the larger houses than they do in actually managing the men. The manager should do more managing. I did not completely blame the right man. The sales manager should be in there.

CHAIRMAN GRAY: You will recall that we had a sales management workshop last summer and spring in which 180 people participated. We had a sales clinic yesterday that started at 1:30 and finished about 4:30. I believe over 100 people participated. We hope to continue to have these sales workshops. We hope that the board of directors of the American Meat Institute will allow us to proceed in 1959 as we did in 1958. The cost in 1959 will be much reduced because much of the groundwork has been paid for.



AUDIENCE at the Friday afternoon meeting is drinking in audio-visual presentations on mechanization and automation.

ALL MEAT . . . output, exports, imports, stocks

Meat Production Down; 6% Below 1957

Meat production continued to decline last week, due mostly to a drop in pork production. Volume of output declined to 375,000,000 lbs. from 382,000,000 lbs. for the previous week, and was 6 per cent smaller than the 399,000,000 lbs. produced in the same week last year. Cattle kill held steady with last week, but numbered about 33,000 head smaller than a year ago. Hog kill, down by about 68,000 head for the week, numbered about 59,000 head below last year. Estimated slaughter and meat production by classes appear below as follows:

Week Ended	BEEF Number M's	BEEF Production Mil. lbs.	PORK (Excl. lard) Number M's	PORK (Excl. lard) Production Mil. lbs.
Oct. 4, 1958	349	198.2	1,190	154.0
Sept. 27, 1958	349	197.5	1,258	161.3
Oct. 5, 1957	382	206.7	1,249	160.3

Week Ended	VEAL Number M's	VEAL Production Mil. lbs.	LAMB AND MUTTON Number M's	LAMB AND MUTTON Production Mil. lbs.	TOTAL MEAT PROD. Mil. lbs.
Oct. 4, 1958	112	12.8	232	10.4	375
Sept. 27, 1958	109	12.9	236	10.6	382
Oct. 5, 1957	161	19.6	265	12.0	399

1950-58 HIGH WEEK'S KILL: Cattle, 462,118; Hogs, 1,859,215; Calves, 200,555; Sheep and Lambs, 369,561.

1950-58 LOW WEEK'S KILL: Cattle, 154,814; Hogs, 641,000; Calves, 55,241; Sheep and Lambs, 137,677.

AVERAGE WEIGHT AND YIELD (LBS.)

Week Ended	CATTLE Live	CATTLE Dressed	HOGS Live	HOGS Dressed
Oct. 4, 1958	1,015	568	225	129
Sept. 27, 1958	1,010	566	225	128
Oct. 5, 1957	986	541	224	128

Week Ended	CALVES Live	CALVES Dressed	SHEEP AND LAMBS Live	SHEEP AND LAMBS Dressed	LARD PROD. Per cwt.	LARD PROD. Mil. lbs.
Oct. 4, 1958	205	114	95	45	—	35.7
Sept. 27, 1958	212	118	95	45	—	42.6
Oct. 5, 1957	221	122	95	45	13.5	37.8

August Meat Output 6% Below 1957

Commercial meat production, excluding farm slaughter in August declined slightly to 1,941,000,000 lbs. from that for July, and showed a 7 per cent decline from last year's August volume of 2,084,000,000 lbs. The eight-month aggregate of 15,806,000,000 lbs. fell 6 per cent below the 16,871,000,000 lbs. produced in the same period last year. Output of each kind of meat was down from last year, for the eight months. Only hog slaughter in August was up from last year, but year totals for all classes were smaller than in 1957. Estimated commercial slaughter and meat production by classes appear below as follows:

COMMERCIAL LIVESTOCK SLAUGHTER BY MONTHS, IN 00's, 1958-57

	Cattle 1958	Cattle 1957	Calves 1958	Calves 1957	Hogs 1958	Hogs 1957	Sheep & Lambs 1958	Sheep & Lambs 1957
Jan.	2,201.9	2,477.2	904.4	1,071.4	6,714.0	6,879.7	1,196.3	1,489.1
Feb.	1,767.3	2,001.2	775.1	913.7	5,421.4	5,995.7	1,051.7	1 2 0.7
Mar.	1,841.9	2,041.2	864.1	1,024.6	5,792.5	6,381.1	1,119.6	1,142.4
Apr.	1,878.9	2,032.2	800.2	989.9	5,920.3	5,977.3	1,298.2	1,213.0
May	1,952.4	2,254.8	716.1	938.1	5,300.5	5 866.1	1,268.1	2,286.4
June	1,988.7	2,078.7	764.4	874.9	5,010.1	4,792.3	1,200.2	1,185.6
July	2,090.7	2,368.9	735.4	987.7	5,161.9	5,032.2	1,179.7	1,358.6
Aug.	1,962.2	2,318.2	725.0	1,009.7	5,347.9	5,310.1	1,100.4	1,259.1
Sept.	....	2,211.1	....	1,044.1	....	5,997.2	....	1 243.2
Oct.	....	2,428.5	....	1,173.8	....	7,223.8	....	1,367.9
Nov.	....	2,038.6	....	963.2	....	6,536.1	....	1,088.4
Dec.	....	1,981.0	....	913.0	....	6,603.4	....	1,103.0
Jan.-Aug.	15,684.0	17,572.4	6,224.7	7,810.0	44,668.6	46,234.6	9,414.2	10,154.9

COMMERCIAL MEAT AND LARD PRODUCTION BY MONTHS IN MILLION POUNDS, 1958-57

	Beef 1958	Beef 1957	Veal 1958	Veal 1957	Pork 1958	Pork 1957	L & M 1958	L & M 1957	Totals 1958	Totals 1957	Lard 1958	Lard 1957
Jan.	1,210	1,326	106	128	802	913	59	72	2,267	2,439	221	226
Feb.	961	1,082	86	107	709	778	53	60	1,809	2,027	170	198
Mar.	986	1,099	92	112	774	831	56	56	1,908	2,098	177	215
Apr.	1,024	1,085	91	113	807	786	65	57	1 987	2,041	188	206
May	1,062	1,203	90	118	734	785	62	60	1,948	2,166	178	211
June	1,079	1,086	91	115	710	663	55	53	1,935	1,917	167	174
July	1 148	1,220	96	132	714	6-7	53	60	2,011	2,099	167	166
Aug.	1,079	1,196	93	138	719	694	50	56	1,941	2,084	158	159
Sept.	...	1,151	...	131	...	760	...	56	...	2,098	...	173
Oct.	...	1,268	...	140	...	935	...	62	...	2,405	...	216
Nov.	...	1,072	...	110	...	865	...	50	...	2,097	...	208
Dec.	....	1.064	...	98	...	883	...	52	...	2,096	...	215
Jan.-Aug.	8,549	9,297	745	963	6,059	6,137	453	474	15,806	16,871	1,426	1,555

AMI PROVISION STOCKS

Provision stocks as reported to the American Meat Institute totaled 72,300,000 lbs. on September 27. This volume was 20 per cent below the 90,100,000 lbs. in stock a year earlier.

Stocks of lard and rendered pork fat at 27,500,000 lbs. were down 40 per cent from 45,900,000 lbs. in stock about a year earlier.

The accompanying table shows stocks as percentages of holding two weeks before and a year earlier.

	Sept. 27 stocks as percentages of inventories on Sept. 13 1958	Sept. 28 1957
HAMS:		
Cured, S.P.-D.C.	106	70
Frozen for cure, S.P.-D.C.	84	60
Total hams	96	60
PICNICS:		
Cured, S.P.-D.C.	113	100
Frozen for cure, S.P.-D.C.	118	98
Total picnics	115	98
BELLIES:		
Cured, D.S.	69	155
Frozen for cure, D.S.	50	100
Cured, S.P.-D.C.	103	80
Frozen for cure, S.P.-D.C.	56	62
OTHER CURED MEATS:		
Cured and in cure	85	81
Frozen for cure	92	72
Total other	86	79
FAT BACKS:		
Cured, D.S.	95	98
FRESH FROZEN:		
Loins, spareribs, neckbones, trimmings, other—Total	96	87
TOT. ALL PORK MEATS	90	80
LARD & R.P.F.	95	60

U.S. Six-Mo. Tallow Exports Down; Europe's Buy Off 65%

The United States exported about 556,610,000 lbs. of inedible tallow in the first six months of this year. This volume represented about a 28 per cent decrease from the 775,767,000 lbs. exported in the same period last year. Exports to Europe, our major tallow market continued to decline, while exports to other American countries rose. Higher U.S. prices and keener competition from Argentina, Australia and Canada were said to have cut into the market for U.S. tallow abroad.

Shipments to other North American countries rose to 67,097,000 lbs. from 48,393,000 lbs. in January-June 1957. Exports to South America at 19,192,000 lbs. compared with 17,317,000 lbs. last year. The European market took 272,164,000 lbs. as against 450,177,000 lbs. last year—a drop of about 65 per cent. Exports of U.S. edible tallow to Africa totaled 52,143,000 lbs. for compared with 63,281,000 lbs. last year. Exports to Asia declined to 145,516,000 lbs. from 195,922,000 lbs. last year.

PROCESSED MEATS . . . SUPPLIES

U.S.S.R. Publishes Meat Export-Import Statistics

Recently published Soviet statistics give U.S.S.R. meat and meat product imports for 1956 at 457,000,000 lbs., 8 per cent below 1955 imports. During both years, Communist China supplied over half of the imports. Meat and meat product imports during 1956 were valued at 400,723,000 rubles ($160,000,000), and 1955 imports were valued at 447,767,000 rubles ($179,000,000 .

Exports of meat and meat products in 1956 amounted to 68,800,000 lbs. valued at 63,206,000 rubles ($25,000,000). About 24,500,000 lbs. of meat and meat products, valued at 23,706,000 rubles ($9,000,000), were exported in 1955. Czechoslovakia and East Germany were the major meat product importers.

These statistics indicate that the Soviet Union was the world's second largest importer of meat and meat products during 1955 and 1956. They also show that Communist China is a much larger exporter of meat than previously realized.

Rise In Pig Crop Could Cut Prices To 1955 Low—USDA

Hog producers have been warned by the U. S. Department of Agriculture that a sharp increase in swine numbers is "almost certain" to have a serious depressing influence on prices next fall. The USDA added that prices on live hogs would drop to their lowest levels since 1955 if the 20 per cent increase in the spring pig crop materializes. A figure of $10.60 was the suggested average level to which hog prices could decline in such an event.

Pigs born in the spring normally go to slaughter in the fall and winter of the same year. But if the spring expansion in the farrowings is moderate, the USDA said, next fall's prices would remain above the low point by an "appreciable margin."

The increase in pig production is already under way, with about a 14 per cent gain foreseen in the fall pig crop. Hog prices to farmers this fall are expected to decline at the normal seasonal rate, and may average no lower than last year. The ensuing price recovery, as the spring crop begins to run out, will possibly leave prices below those of a year earlier.

The cattle population is also on an increase, and a sharp rise could result in heavier marketings and lower prices turn up at the nation's meat counters next year.

HOG-CORN RATIO

The hog-corn ratio based on barrows and gilts at Chicago for the week ended Oct. 4, 1958 was 15.6, the U. S. Department of Agriculture has reported. This ratio compared with the 16.9 ratio for the preceding week and 15.5 a year ago. These ratios were calculated on the basis of No. 3 yellow corn selling at $1.255, $1.237 and $1.186 per bu. during the three periods, respectively.

CALIFORNIA STATE INSPECTED SLAUGHTER

State inspected slaughter of livestock in California, August 1958-57, as reported to THE NATIONAL PROVISIONER.

	August 1958	August 1957
Cattle, head	34,687	40,393
Calves, head	18,753	26,014
Hogs, head	17,182	20,877
Sheep, head	40,618	40,917

Meat and lard production for August 1958-57 (in lbs.) were:

Sausage	9,379,265	7,829,575
Pork and beef	8,833,793	9,009,574
Lard, substitutes	819,438	745,625
Totals	19,032,496	17,584,774

As of August 31, 1958, California had 123 meat inspectors. Plants under state inspection totaled 369, and plants under state approved municipal inspection totaled 54.

Meat Index In Moderate Dip

Meats led the list of consumer commodities which declined in price during the week ended September 30, the Bureau of Labor Statistics has revealed. The wholesale price index on meats declined to 108.4 from the revised 110.0 of the previous week. The average primary market price index settled slightly to 118.8. The same indexes for the corresponding week last year were 91.4 and 117.5 per cent, respectively.

DENVER, OMAHA MEATS

(Carlots, cwt.)

Denver, Oct. 7, 1958	
Choice steer carc., 5/700 lbs.	$40.50@41.00
Choice, steer carc., 7/800 lbs.	39.50@40.00
Choice steer foreqtrs.	35.00
Good steer carc., 6/700 lbs.	39.50
Omaha, Oct. 7, 1958	
Choice steer carc., 7/800 lbs.	40.75
Choice heifer carc., 4/550 lbs.	40.25@41.50

DOMESTIC SAUSAGE

Pork sausage, bulk, (lcl., lb.) in 1-lb. roll	41½@46½
Pork saus., s.c., 1-lb. pk.	59 @67
Franks., s.c., 1-lb. pk.	65½@70
Franks, skinless, 1-lb. package	51 @53
Bologna, ring (bulk)	52½@54
Bologna, art. cas., bulk	45½@46
Bologna, a.c. sliced, 6-7 oz. pk., doz.	3.13@3.84
Smoked liver, h.b., bulk	54½@59
Smoked liver, a.c., bulk	42 @49
Polish saus., smoked	64 @70
New Eng. lunch spec.	67 @73
New Eng. lunch spec. sliced, 6-7 oz. doz.	4.00@4.95
Olive loaf, bulk	49½@57½
O.L., sliced 6-7 oz., doz.	3.27@3.84
Blood, tongue, h.b.	69
Blood, tongue, a.c.	45½@46½
Pepper loaf, bulk	68½@79
P.L., sliced 6-7 oz., doz.	3.33@4.80
Pickle & pimento loaf	46½@55
P.&P. loaf, sliced, 6-7 oz. dozen	3.12@3.60

DRY SAUSAGE

(lcl, lb.)

Cervelat, ch. hog bungs	1.06@1.08
Thuringer	64@66
Farmer	90@92
Holsteiner	76@78
Salami, B.C.	98@1.00
Salami, Genoa style	1.09@1.11
Salami, cooked	53@55
Pepperoni	92@94
Sicilian	1.00@1.02
Goteberg	90@92
Mortadella	65@67

SEEDS AND HERBS

(lcl., lb.)	Whole	Ground
Caraway seed	19½	24½
Cominos seed	53	59
Mustard seed fancy	23	
yellow Amer.	17	
Oregano	44	50
Coriander, Morocco, No. 1	20	24
Morjoram, French	55	60
Sage, Dalmatian, No. 1	56	64

SPICES

(Basis Chicago, original barrels, bags, bales)

	Whole	Ground
Allspice, prime	86	96
Resifted	99	1.01
Chili, pepper	..	48
Chili, powder	..	48
Cloves, Zanzibar	64	69
Ginger, Jam., unbl.	58	64
Mace, fancy Banda	3.50	4.00
West Indies	..	3.50
East Indies	..	3.20
Mustard flour, fancy	..	40
No. 1	..	36
West Indies nutmeg.	..	2.70
Paprika, Amer. No. 1	..	55
Paprika, Spanish	..	75
Cayenne pepper	..	62
Pepper:		
Red, No. 1	..	55
White	50	55
Black	37	41

SAUSAGE CASINGS

(l.c.l. prices quoted to manufacturers of sausage)

Beef rounds:	(Per set)
Clear, 29/35 mm.	1.15@1.25
Clear, 35/38 mm.	1.05@1.20
Clear, 35/40 mm.	85@1.05
Clear, 38/40 mm.	1.05@1.20
Clear, 40/44 mm.	1.30@1.50
Clear, 44/mm./up	1.95@2.50
Not clear, 40 mm./dn.	75@ 85
Not clear, 40 mm./up	85@ 95
Beef weasands:	**(Each)**
No. 1, 24 in./up	14@ 17
No. 1, 22 in./up	10@ 15
Beef middles:	**(Per set)**
Ex. wide, 2½ in./up	3.50@3.70
Spec. wide, 2¼-2½ in.	2.60@2.70
Spec. med. 1⅞-2⅛ in.	1.60@1.75
Narrow, 1⅞ in./dn.	1.20@1.35
Beef bung caps:	**(Each)**
Clear, 5 in./up	33@ 38
Clear, 4½-5 inch	27@ 31
Clear, 4-4½ inch	18@ 20
Clear, 3½-4 inch	12@ 15
Not clear, 4½ inch/up	17@ 20
Beef bladders, salted:	**(Each)**
7¼ inch/up, inflated	19
6½-7¼ inch, inflated	15
5½-6½ inch, inflated	13@ 14
Pork casings:	**(Per hank)**
29 mm./down	4.70@4.80
29/32 mm.	4.50@4.60
32/35 mm.	3.50@3.80
35/38 mm.	3.25@3.50
38/44 mm.	3.10@3.20

Hog bungs:	(Each)
Sow, 34 inch cut	62@67
Export, 34 in. cut	55@59
Large prime, 34 in.	40@42
Med. prime, 34 in.	27@29
Small prime	16@22
Middles, cap off	60@70
Hog skips	5@10
Hog runners, green	19@25
Sheep casings:	**(Per hank)**
26/28 mm.	5.90@6.10
24/26 mm.	5.75@6.00
22/24 mm.	4.75@5.25
20/22 mm.	4.00@4.35
18/20 mm.	2.70@3.35
16/18 mm.	1.50@2.30

CURING MATERIALS

Nitrite of soda, in 400-lb. bbls., del. or f.o.b. Chgo.	Cwt. 11.98
Pure refined gran. nitrate of soda	5.65
Pure refined powdered nitrate of soda	8.65
Salt, paper sacked, f.o.b. Chgo. gran. carlots, ton	30.50
Rock salt in 100-lb. bags, f.o.b. whse. Chgo.	28.50
Sugar:	
Raw, 96 basis, f.o.b. N.Y.	6.45
Refined standard cane gran. basis (Chgo.)	8.85
Packers curing sugar 100-lb. bags, f.o.b. Reserve, La., less 2%	8.90
Dextrose, regular:	
Cerelose, (carlots, cwt.)	7.46
Ex-warehouse, Chicago	7.61

BEEF-VEAL-LAMB . . . Chicago and outside

CHICAGO

Oct. 7, 1958

WHOLESALE FRESH MEATS
CARCASS BEEF

Steers, gen. range: (carlots, lb.)

Prime, 700/800	None quoted
Choice, 500/600	42½@43
Choice, 600/700	42@42½
Choice, 700/800	41½
Good, 500/600	40
Good, 600/700	39½@40
Bull	39
Commercial cow	36½n
Canner-cutter cow	36

PRIMAL BEEF CUTS

Prime:	(Lb.)
Rounds, all wts.	52 @52½
Trimmed loins, 50/70 lbs. (lcl)	78 @83
Square chucks, 70/90 lbs.	39 @40
Arm chucks, 80/110	38
Ribs, 25/35 (lcl)	55 56
Briskets (lcl)	29 @29½
Navels, No. 1	18½
Flanks, rough No. 1	19¼
Choice:	
Hindqtrs., 5/800	50 @50½
Foreqtrs., 5/800	35
Rounds, 70/90 lbs.	51½
Trimmed loins, 50/70 lbs. (lcl)	68 @70
Square chucks, 70/90 lbs.	39 @40
Arm chucks, 80/110	38
Ribs, 25/35 (lcl)	48 @53
Briskets (lcl)	29 @29¼
Navels, No. 1	18½
Flanks, rough No. 1	19¼
Good, (all wts.):	
Rounds	50 @51
Sq. chucks	39 @40
Briskets	27 @28
Ribs	47 @50
Loins	66 @68

COW & BULL TENDERLOINS

Fresh J/L C/C Grade	Froz. C/L
80@84 ... Cow, 3/dn.	None qtd.
94@99 ... Cow, 3/4	None qtd.
1.04@1.08 .. Cow, 4/5	None qtd.
1.20@1.25 .. Cow, 5/up	None qtd.
1.20@1.25 .. Bull, 5/up	None qtd.

BEEF HAM SETS

Insides, 12/up, lb.	62
Outsides, 8/up, lb.	58
Knuckles, 7½/up, lb.	62

BEEF PRODUCTS

(Frozen, carlots, lb.)

Tongues, No. 1 100's	29½n
Tongues, No. 2, 100's	26n
Hearts, regular, 100's	27½n
Livers, regular, 35/50's	27
Livers, selected, 35/50's	32½n
Lips, scalded, 100's	18n
Lips, unscalded, 100's	15½
Tripe, scalded, 100's	9
Tripe, cooked, 100's	10
Melts	8¾
Lungs, 100's	8¾
Udders, 100's	7

FANCY MEATS

(lcl prices, lb.)

Beef tongue, corned	26½
Veal breads, under 12 oz.	70
12 oz./up	85½
Calf tongues, 1 lb./dn.	20
Oxtails, fresh select	22 @24

BEEF SAUS. MATERIALS FRESH

	(Lb.)
Canner-cutter cow meat, barrels	51n
Bull meat, boneless, barrels	52½@53
Beef trimmings, 75/85%, barrels	40
Beef trimmings, 85/90%, barrels	47n
Boneless chucks, barrels	51½
Beef cheek meat, trimmed, barrels	36¼n
Beef head meat, bbls.	33¾n
Veal trimmings, boneless, barrels	46 @46½

VEAL—SKIN OFF

(lcl carcass prices cwt.)

Prime, 90/120	$53.00@55.00
Prime, 120/150	52.00@54.00
Choice, 90/120	49.00@51.00
Choice, 120/150	48.00@50.00
Good, 90/150	44.00@46.00
Com'l, 90/190	40.00@41.00
Utility, 90/190	36.00@38.00
Cull, 60/125	31.00@33.00

CARCASS LAMB

(lcl prices, cwt.)

Prime, 35/45	$49.00@53.00
Prime, 45/55	49.00@53.00
Prime, 55/65	48.00@52.00
Choice, 35/45	48.00@52.00
Choice, 45/55	48.00@52.00
Choice, 55/65	47.00@51.00
Good, all wts.	45.00@50.00

PACIFIC COAST WHOLESALE MEAT PRICES

	Los Angeles Oct. 7	San Francisco Oct. 7	No. Portland Oct. 7
FRESH BEEF (Carcass):			
STEER:			
Choice:			
500-600 lbs.	$44.00@46.00	$43.00@45.00	$46.00@47.00
600-700 lbs.	41.75@44.00	41.50@43.00	45.00@46.00
Good:			
500-600 lbs.	41.00@44.00	41.00@43.00	44.50@46.00
600-700 lbs.	41.00@44.00	40.00@42.00	43.50@45.00
Standard:			
350-600 lbs.	39.00@41.00	37.00@40.00	41.00@44.00
COW:			
Standard, all wts.	None quoted	38.00@40.00	None quoted
Commercial, all wts.	36.50@39.00	37.00@38.00	39.00@41.00
Utility, all wts.	36.50@38.50	36.00@37.00	38.00@40.00
Canner-cutter	33.00@37.00	34.00@36.00	36.00@39.00
Bull, util. & com'l	44.00@46.00	41.00@45.00	43.00@45.00
FRESH CALF:	(Skin-off)	(Skin-off)	(Skin-off)
Choice:			
200 lbs. down	53.00@57.00	None quoted	49.00@53.00
Good:			
200 lbs. down	51.00@55.00	52.00@54.00	45.00@51.00
LAMB (Carcass):			
Prime:			
45-55 lbs.	47.00@50.00	45.00@48.00	44.00@48.00
55-65 lbs.	46.00@48.00	45.00@47.00	None quoted
Choice:			
45-55 lbs.	47.00@50.00	45.00@48.00	44.00@48.00
55-65 lbs.	46.00@48.00	45.00@47.00	None quoted
Good, all wts.	44.00@48.00	42.00@46.00	40.00@44.00
MUTTON (Ewe):			
Choice, 70 lbs./down	20.00@22.00	None quoted	20.00@24.00
Good, 70 lbs./down	20.00@22.00	23.00@25.00	20.00@24.00

NEW YORK

Oct. 7, 1958

WHOLESALE FRESH MEATS
BEEF CARCASSES, CUTS

Steer: (Non-locally dr., cwt.)

Prime, carc., 6/700	$47.50@48.50
Prime, carc., 7/800	47.50@48.50
Choice, carc., 6/700	44.00@46.50
Choice, carc., 7/800	43.00@45.50
Good, carc., 6/700	42.00@44.00
Good, carc., 7/800	42.00@44.00
Hinds., pr., 6/700	56.00@61.00
Hinds., pr., 7/800	56.00@61.00
Hinds., ch., 6/700	53.00@56.00
Hinds., ch., 7/800	51.00@35.00
Hinds., gd., 6/700	50.00@53.00
Hinds., gd., 7/800	49.00@52.00

BEEF CUTS

(Locally dressed, lb.)

Prime steer:	
Hindqtrs., 600/700	55 @61
Hindqtrs., 700/800	55 @61
Hindqtrs., 800/900	55 @60
Rounds, flank off	53 @56
Rounds, diamond bone, flank off	54 @57
Short loins, untrim.	76 @84
Shortloins, trim.	93 @1.04
Flanks	19 @21
Ribs (7 bone cut)	55 @60
Arm chucks	40 @43
Briskets	29 @34
Plates	16½@18
Choice steer:	
Hindqtrs., 600/700	54 @57
Hindqtrs., 700/800	52 @54
Hindqtrs., 800/900	51 @52
Rounds, flank off	53 @56
Rounds, diamond bone, flank off	54 @57
Short loins, untrim.	58 @64
Short loins, trim.	77 @88
Flanks	19 @21
Ribs (7 bone cut)	40 @55
Arm chucks	39 @42
Briskets	28 @33
Plates	16½@18

FANCY MEATS

(lcl prices)

	(Lb.)
Veal breads, 6/12 oz.	95
12 oz. up	1.35
Beef livers, selected	40
Beef kidneys	25
Oxtails, ¾-lb. frozen	25

LAMB

(Carcass prices, cwt.)

	(Local)
Prime, 45/dn.	$53.00@57.00
Prime, 45/55	51.00@57.00
Prime, 55/65	52.00@53.00
Choice, 45/dn.	51.00@53.00
Choice, 45/55	49.00@54.00
Choice, 55/65	49.00@53.00
Good, 45/dn.	49.00@52.00
Good, 45/55	49.00@51.00
Good, 55/65	48.00@51.00
	(Non-local)
Prime, 45/dn.	52.00@54.00
Prime, 45/55	52.00@54.00
Prime, 55/65	52.00@53.00
Choice, 45/dn.	51.00@53.00
Choice, 45/55	49.00@52.00
Choice, 55/65	49.00@51.00
Good, 45/dn.	49.00@51.00
Good, 45/55	48.00@51.00
Good, 55/65	48.00@50.00

VEAL—SKIN OFF

(Carcass prices)	(Non-local)
Prime, 90/120	55.00@58.00
Prime, 120/150	54.00@58.00
Choice, 90/120	50.00@53.00
Choice, 120/150	49.00@53.00
Good, 50/90	47.00@48.00
Good, 90/150	47.00@50.00
Stand., 50/90	44.00@45.00
Stand., 90/150	43.00@44.00
Calf, 200/dn., ch.	43.00@45.00
Calf, 200/dn., gd.	43.00@44.00
Calf, 200/dn., std.	40.00@42.00

NEW YORK RECEIPTS

Receipts reported by the USDA Marketing Service, week ended Oct. 4, 1958, with comparisons:

	Carcasses
STEER AND HEIFER:	
Week ended Oct. 4	9,474
Week previous	9,556
COW:	
Week ended Oct. 4	384
Week previous	290
BULL:	
Week ended Oct. 4	297
Week previous	297
VEAL:	
Week ended Oct. 4	11,892
Week previous	12,727
LAMB:	
Week ended Oct. 4	32,056
Week previous	29,935
MUTTON:	
Week ended Oct. 4	488
Week previous	464
HOG AND PIG:	
Week ended Oct. 4	10,911
Week previous	24,423
BEEF CUTS:	Lbs.
Week ended Oct. 4	234,850
Week previous	163,651
VEAL AND CALF CUTS:	
Week ended Oct. 4	3,000
Week previous	3,000
LAMB AND MUTTON:	
Week ended Oct. 4	3,296
Week previous	923
PORK CUTS:	
Week ended Oct. 4	934,058
Week previous	868,594
BEEF CURED:	
Week ended Oct. 4	581,181
Week previous	156,713
PORK CURED AND SMOKED:	
Week ended Oct. 4	268,293
Week previous	432,643

COUNTRY DRESSED MEAT

VEAL:	Carcasses
Week ended Oct. 4	1,031
Week previous	989
HOGS:	
Week ended Oct. 4	...
Week previous	107
LAMBS:	
Week ended Oct. 4	3
Week previous	...

LOCAL SLAUGHTER

	Head
CATTLE:	
Week ended Oct. 4	12,271
Week previous	12,910
CALVES:	
Week ended Oct. 4	10,290
Week previous	10,986
HOGS:	
Week ended Oct. 4	51,561
Week previous	53,904
SHEEP:	
Week ended Oct. 4	35,497
Week previous	35,618

PHILA. FRESH MEATS

Oct. 7, 1958

STEER CARCASS: (Western, cwt.)	
Choice, 5/700	$45.50@47.00
Choice, 7/800	45.25@46.50
Good, 5/800	43.00@45.25
Hinds., ch., 140/170.	53.00@55.00
Hinds., gd., 140/170.	51.00@53.00
Rounds, choice	53.00@56.00
Rounds, good	52.00@53.00
Full loin, choice	52.00@55.00
Full loin, good	50.00@52.00
Ribs, choice	50.00@55.00
Ribs, good	46.00@50.00
Arm chucks, ch.	39.50@42.00
Arm chucks, gd.	38.00@40.00
STEER CARCASS: (Local, cwt.)	
Choice, 5/700	44.00@47.00
Choice, 7/800	43.50@46.00
Good, 5/800	41.00@45.00
Hinds., ch., 140/170.	53.00@56.00
Hinds., gd. 140/170.	47.00@53.00
Rounds, choice	53.00@56.00
Rounds, good	52.00@53.00
Full loin, choice	50.00@55.00
Full loin, good	47.00@52.00
Ribs, choice	50.00@56.00
Ribs, good	44.00@50.00
Arm chucks, ch.	39.00@42.00
Arm chucks, gd.	37.00@39.00

VEAL CARC., LB.:	Local	West.
Prime, 90/150	54@56	n.q.
Choice, 90/150	52@55	53@55
Good, 50/90	47@49	48@50
Good, 90/120	48@50	49@51
LAMB CARC., LB.:	**Local**	**West.**
Prime, 30/45	53@56	n.q.
Prime, 45/55	52@55	n.q.
Choice, 30/45	53@56	52@54
Choice, 45/55	52@55	51@54
Choice, 55/65	n.q.	49@51
Good, 30/45	49@53	50@52

PORK AND LARD . . . Chicago and outside

CHICAGO PROVISION MARKETS

From the National Provisioner Daily Market Service

CASH PRICES

(Carlot basis, Chicago price zone, Oct. 8, 1958)

SKINNED HAMS

F.F.A. or fresh	Frozen
45½a 10/12	45½n
44½a 12/14	44½n
43 ..... 14/16	43n
42@43n 16/18	42n
41 ..... 18/20	40½
40 ..... 20/22	40
40 ..... 22/24	40
39½n 24/26	39
39½ 25/30	39n
37 ..... 25/up, 2's in	37

PICNICS

F.F.A. or fresh	Frozen
30½a 4/6	30½
28 ..... 6/8	28n
28a 8/10	27½n
28a 10/12	27½n
28a 12/14	27½n
27@27½...8/up, 2's in.....	27n

FAT BACKS

Frozen or fresh	Cured
9½n 6/8	11½n
10¾n 8/10	11¾
12n 10/12	13
13½n ..... 12/14 ...	13¾@14½
14½n 14/16	15½
15¼n 16/18	16¼
15½n 18/20	16½n
16n 20/25	17n

n—nominal, b—bid, a—asked.

BELLIES

F.F.A. or fresh	Frozen
31½@32n .. 6/8 ...	31½@32n
31½@32 ... 8/10 ...	31½@32
30 ..... 10/12	30
30 ..... 12/14	30
30 ..... 14/16	30
30 ..... 16/18	30
30n 18/20	30n
G.A., froz., fresh	D.S. Clear
25@26n 20/25	29n
24@25n 25/30	27n
21½a 30/35	25n
20a 35/40	24n
18 ..... 40/50	23n
Branding quality	D.S. Bellies
..... 20/25	32n
..... 25/30	30n

FRESH PORK CUTS

Job Lot	Car Lot
52@52.. Loins, 12/dn.	51n
51½@52 Loins, 12/16	49n
46@47.. Loins, 16/20	45n
42½.... Loins, 20/up	41½n
40@42.. Butts, 4/8	37b
38@39.. Butts, 8/12	37b
38@39.. Butts, 8/up	37b
40..... Ribs, 3/dn.	36
32@33.. Ribs, 3/5	30
29..... Ribs, 5/up	28½

OTHER CELLAR CUTS

Frozen or fresh	Cured
17½..... Square Jowls, boxed.	n.q.
13½@14½ Jowl Butts, loose..	15n
15n..... Jowl Butts, boxed..	n.q.

LARD FUTURES PRICES

(Drum contract basis)

NOTE: Add ½c to all price quotations ending in 2 or 7.

FRIDAY, OCT. 3, 1958

	Open	High	Low	Close
Oct.	12.30	12.30	12.30	12.30
Nov.	11.92	11.92	11.90	11.90b
Dec.	11.75	11.77	11.75	11.77
Jan.	....	....	....	11.40n

Sales: 620,000 lbs.

Open interest, at close Thurs., Oct. 2: Oct. 90, Nov. 111, Dec. 172, and Jan. 27 lots.

MONDAY, OCT. 6, 1958

Oct.	12.27	12.65	12.27	12.65
Nov.	12.00	12.17	12.00	12.17
Dec.	11.72	11.77	11.72	11.77
Jan.	11.40	11.40	11.40	11.40

Sales: 2,840,000 lbs.

Open interest, at close Friday, Oct. 3: Oct. 87, Nov. 111, Dec. 167, and Jan. 27 lots.

TUESDAY, OCT. 7, 1958

Oct.	12.27	12.65	12.27	12.65
Nov.	12.00	12.17	12.00	12.17
Dec.	11.72	11.77	11.72	11.77
Jan.	11.40	11.40	11.40	11.40

Sales: 1,200,000 lbs.

Open interest at close Monday, Oct. 6: Oct. 79, Nov. 106, Dec. 163, and Jan. 25 lots.

WEDNESDAY, OCT. 8, 1958

Oct.	12.70	12.80	12.70	12.77b
Nov.	12.27-25	12.30	12.25	12.30a
Dec.	11.90	11.95	11.90	11.92
Jan.	11.55	11.55	11.55	11.55

Sales: 1,200,000 lbs.

Open interest at close Tuesday, Oct. 7: Oct. 77, Nov. 97, Dec. 164, and Jan. 27 lots.

THURSDAY, OCT. 9, 1958

Oct.	12.75	12.75	12.65	12.70n
Nov.	12.20	12.20	12.10	12.10b
Dec.	11.90	11.90	11.75	11.75a
Jan.	11.47	11.47	11.35	11.35 -45

Sales: 2,400,000 lbs.

Open interest at close Wed., Oct. 8: Oct. 74, Nov. 100, Dec. 172, and Jan. 29 lots.

LARD FUTURES PRICES

(Loose contract basis)

FRIDAY, OCT. 3, 1958

	Open	High	Low	Close
Dec.	....	....	....	10.40b-50a
Jan.	10.30	10.33b	10.30	10.33b-45a
Mar.	10.15	10.15	10.15	10.0?b-18a
May	....	....	....	10.20b-30a
July	....	....	....	10.20b-30a

Sales: 180,000 lbs.

Open interest at close Thurs., Oct. 2: Dec. 27, Jan. 5, Mar. 17, May none, and July 12 lots.

MONDAY, OCT. 6, 1958

Dec.	10.50	10.50	10.50	10.45b-50a
Jan.	....	....	....	10.38b-44a
Mar.	10.18	10.18	10.18	10.10b-22a
May	....	....	....	10.10b-20a
July	....	....	....	10.16a-25a

Sales: 120,000 lbs.

Open interest at close, Fri., Oct. 3: Dec. 27, Jan. 4, Mar. 18, May none, and July 12 lots.

TUESDAY, OCT. 7, 1958

Dec.	10.60	10.60	10.59	10.55b-60a
Jan.	10.50	10.55	10.45	10.45b-50a
Mar.	10.20	10.25b	10.20	10.15b-21a
May	....	....	....	10.20b-30a
July	....	....	....	10.20b-30a

Sales: 300,000 lbs.

Open interest at close, Mon., Oct. 6: Dec. 27, Jan. 4, Mar. 18, May none, and July 12 lots.

WEDNESDAY, OCT. 8, 1958

Dec.	10.60	10.60	10.60	10.60
Jan.	....	....	....	10.50b-55a
Mar.	....	....	....	10.15b-23a
May	....	....	....	10.15b-23a
July	10.30	10.30	10.29a	10.15b-29a

Sales: TO COME. ....

Open interest at close, Tues., Oct. 7: Dec. 27, Jan. 6, Mar. 19, May none, and July 12 lots.

THURSDAY, OCT. 9, 1958

Dec.	10.50	10.50	10.50	10.40b-50a
Jan.	10.35	10.35	10.25a	10.25b-30a
Mar.	10.10	10.10	10.03a	9.95b-10.03a
May	9.95	9.95	9.95	9.90b-10.00a
July	....	....	....	9.90b-9.98a

Sales: 480,000 lbs.

Open interest at close Wed. Oct. 8: Dec. 28, Jan. 6, Mar. 19, May none, and July 12 lots.

MARGIN CHANGES UNEVEN THIS WEEK

(Chicago costs, credits and realizations for Monday and Tuesday)

The minus margins on light and mediumweight hogs were reduced while margins on heavies fell back this week. Markups in light lean cuts accounted for the gains, while markdowns on large fat cuts offset mostly the small gains on such lean cuts.

	—180-220 lbs.— Value per cwt. alive	Value per cwt. fin. yield	—220-240 lbs.— Value per cwt. alive	Value per cwt. fin. yield	—240-270 lbs.— Value per cwt. alive	Value per cwt. fin. yield
Lean cuts	$13.60	$19.73	$12.88	$18.22	$12.28	$17.80
Fat cuts, lard	5.60	8.07	5.85	8.30	5.92	8.30
Ribs, trimms., etc.	2.31	3.35	2.13	3.06	2.00	2.97
Cost of hogs	$19.86		$19.96		$19.73	
Condemnation loss	.10		.10		.10	
Handling, overhead	1.93		1.75		1.57	
TOTAL COST	21.89	31.72	21.81	30.93	21.40	30.14
TOTAL VALUE	21.51	31.15	20.86	29.58	20.29	28.57
Cutting margin	—$ .38	—$ .57	—$ .95	—$1.35	—$1.11	—$1.57
Margin last week	— .75	— 1.09	— 1.09	— 1.54	— 1.05	— 1.47

PACIFIC COAST WHOLESALE PORK PRICES

	Los Angeles Oct. 7	San Francisco Oct. 7	No. Portland Oct. 7
FRESH PORK (Carcass):	(Packer style)	(Shipper style)	(Shipper style)
80-120 lbs., U.S. No. 1-3.	None quoted	None quoted	None quoted
120-180 lbs., U.S. No. 1-3.	$32.00@36.00	None quoted	$32.50@33.50
LOINS, No. 1:			
8-10 lbs.	51.00@55.00	52.00@55.00	52.00@55.00
10-12 lbs.	51.00@55.00	54.00@58.00	52.00@55.00
12-16 lbs.	51.00@55.00	50.00@54.00	55.00@58.00
PICNICS:	(Smoked)	(Smoked)	(Smoked)
4- 8 lbs.	35.00@40.00	37.00@40.00	38.00@41.00
HAMS:			
12-16 lbs.	48.00@52.00	52.00@56.00	52.00@56.00
16-18 lbs.	48.00@52.00	52.00@56.00	52.00@56.00
BACON "Dry" Cure, No. 1:			
6- 8 lbs.	48.00@61.00	58.00@62.00	51.00@55.00
8-10 lbs.	48.00@59.00	58.00@60.00	48.00@52.00
10-12 lbs.	48.00@56.00	56.00@58.00	47.00@50.00
LARD, Refined:			
1-lb. cartons	18.25@20.25	20.00@21.00	17.50@20.00
50-lb. cartons & cans.	15.25@20.00	19.00@20.00	None quoted
Tierces	15.00@19.25	17.50@19.00	14.50@18.00

CHGO. FRESH PORK AND PORK PRODUCTS

Oct. 7, 1958

	(lcl lb.)
Hams, skinned, 10/12	47
Hams ,skinned, 12/14	46
Hams, skinned, 14/16	44
Picnics, 4/6 lbs.	31½
Picnics, 6/8 lbs.	29
Pork loins, boneless	65
Shoulders, 16/dn., loose	35
(Job lots, lb.)	
Pork livers	20 @22
Tenderloins, fresh, 10's	83 @85
Neck bones, bbls.	12 @13
Ears, 30's	12½
Feet, s.c., bbls.	8 @10

CHGO. PORK SAUSAGE MATERIALS—FRESH

(To sausage manufacturers)

Pork trimmings:	(Job lots)
40% lean, barrels	22½
50% lean, barrels	23
80% lean, barrels	40½@41
95% lean, barrels	48
Pork head meat	36¾
Pork cheek meat, barrels	40 @40½

CHGO. WHOLESALE SMOKED MEATS

Oct. 7, 1958

Hams, skinned, 14/16 lbs., wrapped	(Av.) 49
Hams, skinned, 14/16 lbs., ready-to-eat, wrapped	50
Hams, skinned, 16/18 lbs., wrapped	49
Hams, skinned, 16/18 lbs., ready-to-eat, wrapped	50
Bacon, fancy trimmed, brisket off, 8/10 lbs., wrapped	43
Bacon, fancy sq. cut, seedless, 12/14 lbs., wrapped	42
Bacon, No. 1 sliced 1-lb. heat seal, self-service, pkg.	57

PHILA., N. Y. FRESH PORK

LOCALLY DRESSED

Oct. 7, 1958

PHILADELPHIA	(lcl., lb.)
Reg. loins, 8/12	53 @56
Reg. loins, 12/16	53 @56
Boston Butts, 4/8	43 @46
Spareribs, 3/down	43 @46
Spareribs, 3/5	38 @42
Skinned hams, 10/12	47 @50
Skinned hams, 12/14	45 @49
Bellies, 10/14	37½@41
Picnics, s.s. 4/6	34 @37
NEW YORK	(box lots, lb.)
Loins, 8/12 lbs.	49 @56
Loins, 12/16 lbs.	49 @56
Hams, sknd., 12/16	46 @52
Boston butts, 4/8	41 @45
Reg. picnics, 4/8	31 @35
Spareribs, 3/down	40 @46

PACKERS' WHOLESALE LARD PRICES

Refined lard, drums, f.o.b. Chicago	$15.25
Refined lard, 50-lb. fiber cubes, f.o.b. Chicago	15.75
Kettle rendered, 50-lb. tins, f.o.b. Chicago	16.25
Leaf kettle rendered, drums, f.o.b. Chicago	16.25
Lard flakes	17.00
Neutral, drums, f.o.b. Chicago	16.75
Standard shortening, N. & S. (del.)	19.75
Hydro. shortening, N. & S...	20.25

WEEK'S LARD PRICES

	P.S. or D. R. cash tierces Bd. Trade	Dry rend. loose (Open Mkt.)	Ref. in 50-lb. this (Open Mkt.)
Oct. 3	12.50n	11.62½	14.00n
Oct. 6	12.85b	11.75	14.25n
Oct. 7	13.10n	12@12¼	14.50n
Oct. 8	12.87½n	12.50n	15.00n
Oct. 9	12.75a	12.37½n	15.00n

n—nominal, b—bid, a—asked.

BY-PRODUCTS . . . FATS AND OILS

BY-PRODUCTS MARKET

(F.O.B. Chicago, unless otherwise indicated)
Wednesday, Oct. 8, 1958

BLOOD

Unground per unit of ammonia, bulk	7.25@7.50n

DIGESTER FEED TANKAGE MATERIALS

Wet rendered, unground, loose	
Low test	8.25@8.50n
Med. test	8.00@8.25n
High test	7.75@8.00n

PACKINGHOUSE FEEDS

	Carlots, ton
50% meat, bone scraps, bagged	$100.00@110.00
50% meat, bone scraps, bulk	97.50@100.00
60% digester tankage, bagged	107.50@112.50
60% digester tankage, bulk	105.00@107.50
80% blood meal, bagged	120.00@140.00
Steam bone meal, 50 lb. bags, (specially prepared)	90.00
60% steam bone meal, bagged	75.00

FERTILIZER MATERIALS

Feather tankage, ground per unit of ammonia	*5.75n
Hoof meal, per unit ammonia	*6.75

DRY RENDERED TANKAGE

Low test, per unit prot.	1.90n
Medium test, per unit prot.	1.85n
High test, per unit prot.	1.80@1.85n

GELATINE AND GLUE STOCKS

Bone stock (gelatine), ton	25.00
Cattle jaws, feet (non-gel.), ton	9.00@13.00
Trim bone, ton	12.00@17.00
Pigskins (gelatine), cwt.	7.50
Pigskins (rendering), piece	15@25

ANIMAL HAIR

Winter coil dried, per ton	None quoted
Summer coil dried, per ton	†25.00@30.00
Cattle switches, per piece	2@3
Winter processed (Nov.-Mar.) gray, lb.	11
Summer processed (April-Oct.) gray, lb.	5@6

*Delv'd, †c.a.f. Midwest, n—nominal, a—asked

TALLOWS and GREASES

Wednesday, October 8, 1958

Eastern destination and midwest inquiry imparted firmness to the inedible tallow and grease market late last week. Trade volume was light. Bleachable fancy tallow traded at 7¾c, c.a.f. Chicago, with bids at 7⅝c, f.o.b. Chicago. The same material met inquiry at 8¼@8⅜c, c.a.f. New York. The outside price was on hard body material. Offers were heard at 8½c. Choice white grease, all hog, traded at 8½c, delivered East.

Choice white grease, not all hog, was bid at 7½c, c.a.f. Chicago. Several tanks of yellow grease changed hands at 6⅝c, c.a.f. Chicago. A tank of hard body bleachable fancy tallow sold at 8⅜c, and a few tanks of original fancy tallow at 8¾c, all c.a.f. New York.

A few tanks of edible tallow traded at 10c, f.o.b. River. B-white grease and special tallow were bid at 7⅛c, c.a.f. Chicago. A few more tanks of choice white grease, all hog, sold on Friday at 8½c, c.a.f. New York. A couple of tanks of special tallow sold at 7⅞c, delivered East. Some special tallow sold at 7⅞c, also c.a.f. East. Yellow grease met buying interest at 6⅝@6¾c, c.a.f. Chicago.

No changes in the price pattern was reported on Monday of this week, with offerings limited. Some inquiry was reported at last sale prices. A tank of high titre bleachable tallow sold at 8½c, c.a.f. East.

Firmness continued on Tuesday, with sales of bleachable fancy tallow reported at 7¾c f.o.b. Chicago and at 7⅞c c.a.f. Chicago. Some inquiry was noted at 8⅜c@8½c c.a.f. East, the outside price for hard body material. Special tallow was firm at 7¼c, c.a.f. Chicago, and was reported at 7⅞c c.a.f. East. The market undertone on edible tallow continued firm, with most offerings at 10¼c f.o.b. River. A tank of edible tallow sold at 10⅞c c.a.f. Chicago, although most inquiry earlier in the day was at 10½c@10⅝c c.a.f. Chicago. A couple of tanks of yellow grease sold Tuesday at 6¾c, c.a.f. Chicago, and a

for Convenient, Daily
PICK-UP SERVICE



. . . contact

your local DARLING Representative, or phone collect to the DARLING & COMPANY plant nearest you. DARLING's fast, convenient, pick-up service can *save you money* and space, and help keep your premises clean.

And remember—if 76 years' experience in serving the meat industry can help you solve a problem of any kind, we'd like to help you . . . at no cost.

DARLING'S
SINCE 1882
SERVICE

"BUYING and Processing Animal By-Products for Industry"

There's a
DARLING & COMPANY
Truck . . . as near as your phone

- YArds 7-3000
  4201 S. Ashland Ave.
  CHICAGO
- Fillmore 0655
  P.O. Box 5, Station "A"
  BUFFALO
- WArwick 8-7400
  P.O. Box 329, Main P.O., Dearborn, Mich.
  DETROIT
- ONtario 1-9000
  P.O. Box 2218, Brooklyn Station
  CLEVELAND
- VAlley 1-2726
  Lockland Station
  CINCINNATI
- Waucoma 500
  P.O. Box 500
  ALPHA, IOWA
- Elgin 2-4600
  P.O. Box 97
  CHATHAM, ONTARIO, CANADA

. . . or your local
DARLING & COMPANY
Representative

tank of B-white sold at 7⅛c, c.a.f. Chicago.

On Wednesday, offerings were scarce, and the market undertone firm. Bleachable fancy was in fair call at 7⅞c c.a.f. Chicago. Some offerings of bleachable were made at 8¾c c.a.f. East, but the best interest early was 8½c. Special tallow was on call at 7¼c c.a.f. Chicago. Choice white grease, all hog, was indicated early at 8½c c.a.f. East, but some sellers tried for 8⅝c but no sales were confirmed early. Sellers asked 11c Chicago basis, on edible tallow up to about midday Wednesday.

EASTERN BY-PRODUCTS

New York, Oct. 8, 1958

Dried blood was quoted today at $6.25@$6.50 per unit of ammonia. Low test wet rendered tankage was listed at $7 per unit of ammonia and dry rendered tankage was priced at $1.55@$1.60 per protein unit.

N.Y. COTTONSEED OIL FUTURES

FRIDAY, OCT. 3, 1958

	Open	High	Low	Close	Prev. close
Oct.	13.10b	13.30	13.11	13.28b	13.23b
Dec.	13.01b	13.15	13.00	13.15	13.07
Jan.	13.00n	....	....	13.15n	13.05n
Mar.	13.10b	13.22	13.08	13.21b	13.17b
May	13.10b	13.20	13.10	13.26	13.19
July	12.91b	....	....	13.17b	13.10
Sept.	12.85b	12.85	12.85	12.85b	12.85b

Sales: 100 lots.

MONDAY, OCT. 6, 1958

Oct.	13.25b	13.28	13.20	13.32b	13.28b
Dec.	13.10b	13.21	13.06	13.18b	13.15
Jan.	13.10n	....	....	13.15n	13.15n
Mar.	13.20b	13.27	13.20	13.25b	13.21b
May	13.24b	13.28	13.15	13.27b	13.26
July	13.15b	13.15	13.15	13.17b	13.17b
Sept.	12.85b	....	....	12.85b	12.85b

Sales: 113 lots.

TUESDAY, OCT. 7, 1958

Oct.	13.32b	13.37	13.37	13.34b	13.32b
Dec.	13.20	13.25	13.15	13.16	13.18b
Jan.	13.20n	....	....	13.15n	13.15n
Mar.	13.29	13.31	13.19	13.19b	13.25b
May	13.30	13.31	13.21	13.21b	13.27b
July	13.15b	13.15	13.08	13.09	13.17b
Sept.	12.85b	....	....	12.80b	12.85b

Sales: 158 lots.

WEDNESDAY, OCT. 8, 1958

Oct.	13.20b	13.35	13.30	13.29b	13.34b
Dec.	13.13b	13.19	13.07	13.08	13.16
Jan.	13.13n	....	....	13.08n	13.15n
Mar.	13.18	13.22	13.13	13.15	13.19b
May	13.14b	13.25	13.15	13.15b	13.21b
July	13.09b	13.05	13.03	13.05	13.09
Sept.	12.80b	....	....	12.85b	12.80b

Sales: 174 lots.

VEGETABLE OILS

Wednesday, Oct. 8, 1958

Crude cottonseed oil, f.o.b.	
Valley	11⅛
Southeast	11¼a
Texas	10½@10⅝
Corn oil in tanks, f.o.b. mills	12¾a
Soybean oil, f.o.b. Decatur	10⅜@10½
Coconut oil, f.o.b. Pacific Coast	15
Peanut oil, f.o.b. mills	15⅝@16n
Cottonseed foots:	
Midwest and West Coast	1¼@ 1⅜
East	1¼@ 1⅜

OLEOMARGARINE

Wednesday, Oct. 8, 1958

White dom. vegetable (30-lb. cartons)	26
Yellow quarters (30-lb. cartons)	27
Mill churned pastry (750 lbs., 30's)	23½
Water churned pastry (750 lbs., 30's)	22½
Bakers drums ton lots	19¼

OLEO OILS

Wednesday, Oct. 8, 1958

Prime oleo stearine (slack barrels)	12⅝
Extra oleo oil (drums)	17¾
Prime oleo oil (drums)	17@17¼

n—nominal, a—asked, b—bid, pd—paid.

HIDES AND SKINS

Packer hides firm, with spots fractionally higher – Small packer and country hides mostly steady, with higher prices asked early–Calfskins firm to higher–Sheepskins firm, with better kinds in broad demand.

CHICAGO

PACKER HIDES: A steady to firm undertone best described the hide market at the close of last week. Volume of sales last week was estimated at 110,000 hides. This week opened on a quiet note, with no reported trading on Monday. On Tuesday, about 35,000 hides sold, including light cows at 15½c, Northern point, 16c Chicago, and 17c Missouri point, all up ½c. Also Tuesday heavy cows sold at 13@13½c as to points, steady, and heavy steers brought 12@12½c, depending on shipping points, also steady. Branded steers sold steady, with butt-brands going at 10c and Colorados at 9c.

On Wednesday, light cows sold at 15½@16c, as to points. Heavy steers and heavy cows sold at steady prices. About 8,000 Southeastern hides sold at 21½c, up 1c over last trading basis. A mixed pack of branded steers sold at 10¼c on butts and 9¼c on light average Colorados.

SMALL PACKER AND COUNTRY HIDES: The higher asking prices were not met by tanners, the result being a steady market. Midwestern 50/52-lb. average allweights sold at 12½c, selected, with some Ohio production bringing 13c. Some 60/62-lb. natives sold at 10½@11c. Locker-butcher 50/52-lb. country hides were a shade firmer at 10@10¼c, 48/50-lb. renderers steady at 8½@9c, and No. 3 hides slow at 6¼@6½c.

CALFSKINS AND KIPSKINS: Late last week 6,500 Southeastern kipskins sold at 39c, with overweights bringing 36c. Thursday, Northern light calfskins sold at 57½c, up 2½c over recent bids. Heavy calfskins were listed at 50c nominal. Small packer allweight calfskins were quoted at 40@45c, and allweight kipskins at 29@30c. Country allweight calfskins were quoted at 25@26c and allweights at 20c f.o.b. shipping points. On Tuesday of this week, a large independent Iowa packer sold 2,300 kipskins at 40c, also 500 overweights at 37c.

SHEEPSKINS: The shearling market was firm, with better grades moving well. Midwestern-River No. 1's sold from 1.00@1.45, with some Southwesterns bringing 1.85@2.00. Most No. 2 shearlings sold at .50@.60 and No. 3's were draggy at .25@.40. Fall clips, of good quality, moved at 2.00@2.25, and others down to 1.75. Midwestern-Interior lamb pelts were firm at 1.40@1.55. Full wool dry pelts were quoted at .17@.18 on a nominal basis.

CHICAGO HIDE QUOTATIONS

PACKER HIDES

	Wednesday, Oct. 8, 1958	Cor. date 1957
Lgt. native steers	16 @16½n	15½@16n
Hvy. nat. steers	12 @12½	11½@12n
Ex. lgt. nat. steers	19 @19½n	20n
Butt-brand. steers	10	9½n
Colorado steers	9	9n
Hvy. Texas steers	9½n	9½n
Light Texas steers	14n	12½n
Ex. lgt. Texas steers	17½n	16½n
Heavy native cows	13 @13½	11½@12n
Light nat. cows	15½@18	14½@17n
Branded cows	12 @13n	11 @12n
Native bulls	7½@ 8½n	7½@ 8½n
Branded bulls	6½@ 7½n	6½@ 7½n
Calfskins:		
Northerns, 10/15 lbs.	50n	45n
10 lbs./down	57½n	40n
Kips, Northern native, 15/25 lbs.	40	32n

SMALL PACKER HIDES

STEERS AND COWS:		
60 lbs. and over	10½@11n	9½n
50 lbs.	12½n	11½n

SMALL PACKER SKINS

Calfskins, all wts.	40 @45	27 @29n
Kipskins, all wts.	29 @30	23 @24n

SHEEPSKINS

Packer shearlings:		
No. 1	1.00@2.00	2.00@3.00n
No. 2	50@ 60	1.60@2.00
Dry Pelts	17@18n	27@ 30n
Horsehides, untrim.	7.00@7.50	8.00@8.25n
Horsehides, trim.	6.50@7.00	7.25@7.50n

N. Y. HIDE FUTURES

FRIDAY, OCT. 3, 1958

	Open	High	Low	Close
Oct.	11.95b	....	....	11.95b-12.55a
Jan.	....	....	....	12.10b

Sales: none.

Oct.	12.75b	....	....	12.75b-13.15a
Jan.	13.00b	....	....	13.00b- 20a
Apr.	13.10b	....	....	13.05b- 30a
July	13.20b	....	....	13.20b- 50a
Oct.	13.30b	....	....	13.30b- 70a

Sales: none.

MONDAY, OCT. 6, 1958

Oct.	11.95b	....	....	11.95b-12.95a
Jan.	....	....	....	12.10b

Sales: none.

Oct.	12.60b	....	....	12.60b-13.10a
Jan.	12.90b	....	....	12.90b-13.25a
Apr.	13.00b	....	....	13.00b-13.30a
July	13.05b	....	....	13.20b- 50a
Oct.	13.10b	....	....	13.25b- 60a

Sales: two lots.

TUESDAY, OCT. 7, 1958

Oct.	11.95b	....	....	11.95b-12.95a
Jan.	....	....	....	12.10n

Sales: none.

Oct.	12.50b	....	....	12.60b- 85a
Jan.	12.91	12.91	12.91	12.90b-13.10a
Apr.	13.00b	....	....	13.05b- 30a
July	13.15b	13.40	13.40	13.30b- 45a
Oct.	13.25b	....	....	13.35b

Sales: two lots.

WEDNESDAY, OCT. 8, 1958

Oct.	11.95b	....	....	11.95b-12.95a
Jan.	....	....	....	12.10b

Sales: none.

Oct.	12.60b	....	....	12.60b-13.15a
Jan.	12.90b	....	....	12.90b-13.25a
Apr.	13.00b	13.30	13.30	13.20b- 30a
July	13.20b	....	....	13.20b- 40a
Oct.	13.25b	....	....	13.25b- 50a

Sales: one lot.

THURSDAY, OCT. 9, 1958

Oct.	11.90b	....	....	11.90b-12.95a
Jan.	....	....	....	12.05b

Sales: none.

Oct.	12.50b	....	....	12.50b-13.15a
Jan.	12.80b	....	....	12.80b-13.25a
Apr.	13.00b	....	....	13.00b- 40a
July	13.10b	....	....	13.15b- 60a
Oct.	13.15b	....	....	13.15b- 75a

Sales: none.

NOTE: Upper series of months each day old contracts; lower series, new contracts.

LIVESTOCK MARKETS . . . Weekly Review

Iowa 'Sirloin Special' Gets Hearty Welcome In Chicago

The Franklin County, Ia., "Sirloin Special" cattle caravan which left Hampton late Saturday evening after being given a rousing sendoff arrived at the Chicago Stockyards early Sunday morning to meet an equally hearty welcome at the Yards. The cavalcade consisted of 63 truckloads of fat cattle.

Walter A. Kelderhouse of Iowa Falls, president of the Franklin County Beef Producers Association said that the huge caravan arrived about two hours earlier than had been expected. The caravan included two bus loads of cattle feeders and Franklin County businessmen.

The vehicles assembled at Hampton, where thousands of people had gathered to give them a thunderous sendoff. A huge feed was spread there for the truckers and those making the trip. The crowd of about 7,000 persons helped consume more than 2,200 lbs. of beef barbecue and 200 gallons of beans, as well as gallons of coffee and milk, free of charge.

The Iowa highway patrol escorted the caravan to the river, after which police in towns along the way cooperating to render the long line of vehicles uninterrupted passage.

Arriving at the Yards early Sunday morning, the cattle feeders had breakfast as guests of the Morris Mens' Shop and the Jack Knike shop, and later in the day toured the city in General Motors Corp. busses. In the evening they dined as guests of the GMC Truck Division and the Union Stock Yard and Transit Co. The Yellow Manufacturing Corp., staged a dinner for the truckers who had hauled the cattle.

KINDS OF LIVESTOCK KILLED

†Classification of livestock slaughtered under federal inspection in Aug. 1958, compared with July 1958 and Aug. 1957, is shown below:

	Per cent		
	Aug. 1958	July 1958	Aug. 1957
Cattle:			
Steers	57.8	59.0	50.5
Heifers	17.1	15.7	14.9
Cows	23.4	23.5	32.2
Bulls and stags	1.7	1.8	2.4
Total[1]	100.0	100.0	100.0
Canners & cutters[2]	10.5	10.5	18.3
Hogs:			
Sows	11.8	17.2	16.5
Barrows and gilts	87.7	81.9	82.9
Stags and boars	.5	.9	.6
Total[1]	100.0	100.0	100.0
Sheep and Lambs:			
Lambs & yearlings	93.0	92.1	92.5
Sheep	7.0	7.9	7.5
Total[1]	100.0	100.0	100.0

†Based on reports from packers.
[1]Totals based on rounded numbers.
[2]Included in cattle classification.

STOCKER-FEEDER MOVEMENT

Stocker and feeder livestock received in nine Corn Belt states in August 1958-57:

CATTLE AND CALVES	August	
	1958	1957
Public stockyards	180,934	264,725
Direct	183,101	210,333
Totals	364,035	475,058
July-Aug. totals	612,949	746,772
SHEEP AND LAMBS		
Public stockyards	112,616	125,958
Direct	243,591	226,528
Totals	356,207	352,486
July-Aug. totals	621,678	574,700

Data in this report were obtained from state veterinarians. Under "Public Stockyards" are included stockers and feeders bought at stockyard markets. Under "Direct" the included stock coming from points other than public stockyards, some of which are inspected and fed at public stockyards en route.

LIVESTOCK IMPORTS

Cattle and calves from Canada and Mexico passed for entry into the U. S. Aug. 1958, with comparisons:

Month	Canada		Mexico	
	1958 Head	1957 Head	1958 Head	1957 Head
Aug.	38,906	29,904	10,384	9,403
Jan.-Aug.	318,482	82,271	307,196	174,306

Livestock Costs To Packers In August Above Last Year

Packers operating under federal inspection in August found prices on all livestock higher than in the same month of 1957.

Average cost of cattle in August at $22.79 was 16 per cent higher than in 1957; calves at $24.34 cost 32 per cent more than in 1957; hogs at $21.03 had 12 per cent of the 1957 value, and sheep and lambs averaging $21.18 cost 2 per cent more per cwt. than in August 1957.

The 1,479,000 cattle, 424,000 calves, 4,515,000 hogs and 950,000 sheep and lambs slaughtered in August had dressed yields of:

	Aug. 1958 1,000 lbs.	Aug. 1957 1,000 lbs.
Beef	843,619	925,170
Veal	54,775	85,206
Pork (carcass, wt.)	800,585	767,401
Lamb and mutton	42,973	49,725
Totals	1,741,952	1,827,502
Pork, excl. lard	610,151	579,219
Lard production	139,355	137,940
Rendered pork fat	6,830	7,533

Average live weights in August 1958-57 were as follows:

	Aug. 1958 lbs.	Aug. 1957 lbs.
All cattle	1,002.2	969.1
Steers[1]	1,044.7	1,005.0
Heifers[2]	876.4	846.5
Cows[1]	987.6	959.7
Calves	231.5	245.4
Hogs	232.3	229.2
Sheep and lambs	94.0	94.2

Dressed yields per 100 lbs. live weight for Aug. 1958-57 were:

	Aug. 1958 Per cent	Aug. 1957 Per cent
Cattle	57.1	55.5
Calves	55.9	56.6
Hogs[2]	76.5	75.9
Sheep and lambs	48.4	47.8
Lard, per cwt., lbs.	13.3	13.6
Lard, per hog, lbs.	30.9	31.3

Average dressed weights of livestock compared as follows (lbs.):

	Aug. 1958	Aug. 1957
Cattle	572.3	537.9
Calves	129.4	138.9
Hogs	177.7	174.0
Sheep and lambs	45.5	45.0

[1]Included in cattle.
[2]Subtract 7.0 to get packer style average.

GEO. S. HESS R. Q. (PETE) LINE
INDIANAPOLIS HOG MARKET
HESS-LINE CO.
HOG ORDER BUYERS EXCLUSIVELY
TELEPHONE MELROSE 7-5481
HESS-LINE CO.
EXCHANGE BLDG. INDIANAPOLIS STOCK YARDS
INDIANAPOLIS 21, IND.

AIR-O-CHEK
The casing valve with the internal fulcrum lever

Send for Bulletin
AIR-WAY
Operator holds casing on nozzle and controls flow with same hand
AIR-WAY PUMP & EQUIPMENT CO., 4501 W. Thomas St., Chicago 51, Ill.


WESTERN BUYERS
LIVESTOCK ORDER BUYERS
Phone: Cypress 4-2411
ALGONA, IOWA
WE BUY HOGS IN THE HEART OF THE CORN BELT
10 OFFICES TO SERVE YOU

PACKERS' PURCHASES

Purchases of livestock by packers at principal centers for the week ended Saturday, October 4, 1958, as reported to the NATIONAL PROVISIONER:

CHICAGO

Armour, 5,341 hogs; shippers, 18,866 hogs; and others, 16,181 hogs. Totals: 21,660 cattle, 348 calves, 40,388 hogs and 3,486 sheep.

KANSAS CITY

	Cattle	Calves	Hogs	Sheep
Armour..	1,571	243	3,036	439
Swift ..	1,413	317	3,888	1,094
Wilson .	1,038	3	3,306	...
Butchers	4,726	...	81	...
Others .	1,297	...	5,036	687
Totals	10,045	563	15,347	2,820

OMAHA

	Cattle & Calves	Hogs	Sheep
Armour ...	4,374	5,511	1,441
Cudahy ...	2,623	4,469	1,297
Swift	3,527	6,408	1,248
Wilson ...	2,671	4,315	926
Neb. Beef .	682	...	...
Am. Stores	1,401	...	...
Cornhusker.	1,065	...	...
O'Neill	1,231	...	...
R. & C. ...	719	...	...
Gr. Omaha.	674	...	...
Rothschild..	1,179	...	...
Roth	973	...	...
Kingan ...	785	...	...
Omaha D.B.	354	...	...
Omaha ...	604	...	...
Union	1,436	...	...
Others	481	6,804	...
Totals	24,779	27,507	4,912

ST. JOSEPH

	Cattle	Calves	Hogs	Sheep
Swift ..	3,333	115	10,748	2,628
Armour..	2,229	29	7,418	1,154
Seits ...	659	...	...	...
Others .	3,704	...	1,890	...
Totals*	9,925	144	20,056	3,782

*Do not include 378 cattle, 49 calves, 1,897 hogs and 3,714 sheep direct to packers.

N. S. YARDS

	Cattle	Calves	Hogs	Sheep
Armour..	1,697	...	5,409	...
Hunter .	703	...	3,665	...
Heil ...	...	...	2,541	...
Krey ...	...	...	6,967	...
Totals	2,400	...	18,582	...

DENVER

	Cattle	Calves	Hogs	Sheep
Armour..	164	...	...	6,330
Swift ..	1,131	16	2,443	12,849
Cudahy .	629	32	4,094	...
Wilson .	569	...	...	5,772
Others .	6,063	22	980	548
Totals	8,556	70	7,517	25,499

SIOUX CITY

	Cattle	Calves	Hogs	Sheep
Armour..	2,695	...	5,007	2,326
Swift ..	3,608	...	4,907	689
S. C. Dr. Beef ..	4,369	...	...	...
S. C. Dr. Pork ..	...	...	8,096	...
Raskin .	912	...	...	...
Butchers	372	...	...	...
Others .	10,305	25	12,170	1,262
Totals	22,261	25	30,180	4,277

OKLAHOMA CITY

	Cattle	Calves	Hogs	Sheep
Armour..	747	40	416	131
Wilson .	1,111	126	1,398	173
Others .	1,532	66	838	386
Totals*	3,390	232	2,652	690

*Do not include 1,113 cattle, 50 calves and 4,749 hogs direct to packers.

LOS ANGELES

	Cattle	Calves	Hogs	Sheep
Cudahy .	...	...	249	...
Swift ..	32	...	...	...
Wilson .	19	...	...	...
United .	589	1	574	...
Atlas ..	584	...	...	...
Ideal ..	504	...	...	...
Goldring.	320	...	...	...
Quality..	215	...	...	...
Star ...	188	...	...	...
Gr. West.	134	...	...	...
Coast ..	175	...	...	...
Clough'ty	...	...	6	...
Others .	476	46	348	...
Totals	3,236	47	928	...

MILWAUKEE

	Cattle	Calves	Hogs	Sheep
Packers.	1,584	5,910	5,640	980
Butchers	3,404	1,463	240	236
Totals	4,988	7,373	5,880	1,216

WICHITA

	Cattle	Calves	Hogs	Sheep
Cudahy .	956	131	2,480	...
Dunn ..	46	...	...	...
Dold ...	30	...	523	...
Excel ..	458	...	...	...
Armour..	...	...	...	112
Swift ..	...	...	...	860
Others .	2,183	...	95	817
Totals	3,673	131	3,098	1,801

ST. PAUL

	Cattle	Calves	Hogs	Sheep
Armour..	4,627	1,902	15,141	2,484
Bartusch	1,061	...	...	...
Rifkin .	881	14	...	...
Superior	1,901	...	...	...
Swift ..	4,945	1,965	29,934	2,184
Others .	3,921	3,620	9,161	3,651
Totals	17,336	7,501	54,236	8,319

FORT WORTH

	Cattle	Calves	Hogs	Sheep
Armour..	168	542	810	1,372
Swift ..	715	342	827	688
City	605	4	...	...
Rosenthal	34	5	...	...
Totals	1,522	893	1,637	2,060

TOTAL PACKER PURCHASES

	Week ended Oct. 4	Prev. week	Same week 1957
Cattle	133,771	138,652	153,109
Hogs	228,008	245,826	242,662
Sheep	58,862	57,203	66,730

CORN BELT DIRECT TRADING

Des Moines, Oct. 8—Prices on hogs at 14 plants and about 30 concentration yards in interior Iowa and southern Minnesota, as quoted by the USDA:

Barrows, gilts, U.S. No. 1-3:

180/200 lbs.	$16.50@18.75
200/220 lbs.	18.25@19.00
220/240 lbs.	17.95@18.90
240/270 lbs.	17.70@18.70
270/300 lbs.	17.25@18.40

Sows, U.S. 1-3:

270/330 lbs.	17.25@18.50
330/400 lbs.	16.50@18.00
400/550 lbs.	15.00@17.10

Corn Belt hog receipts, as reported by the USDA:

	This week est.	Last week actual	Last year actual
Oct. 2	45,000	68,500	67,000
Oct. 3	40,000	51,000	49,000
Oct. 4	30,500	35,000	33,500
Oct. 6	67,000	84,000	90,000
Oct. 7	93,000	71,000	75,000
Oct. 8	70,000	50,500	67,000

LIVESTOCK PRICES AT INDIANAPOLIS

Livestock prices at Indianapolis on Wednesday, Oct. 8 were as follows:

CATTLE:	Cwt.
Steers, choice	$26.00@27.00
Steers, good	24.50@26.00
Heifers, ch. & pr.	25.00@27.75
Cows, util. & com'l.	17.50@19.00
Cows, can & cut...	13.00@18.25
Bulls, util. & com'l.	21.00@23.00
Bulls, cutter	18.00@21.00
VEALERS:	
Good & choice	28.00@32.00
Stand. & gd.	24.50@28.00
Calves, gd. & ch.	25.00@28.00
HOGS, U.S. No. 1-3:	
140/160 lbs.	18.00@18.75
160/180 lbs.	18.75@19.75
180/200 lbs.	19.75@20.25
200/220 lbs.	19.75@20.25
220/240 lbs.	19.75@20.25
240/270 lbs.	19.50@20.15
270/300 lbs.	19.00@19.50
Sows, U.S. No. 1-3:	
180/300 lbs.	18.50@19.40
300/360 lbs.	18.25@19.00
360/450 lbs.	17.75@18.50
LAMBS:	
Good & choice	20.50@22.00
Utility & good	17.00@20.50

WEEKLY INSPECTED SLAUGHTER

Slaughter of livestock at major centers during the week ended Oct. 4, 1958 (totals compared) was reported by the U. S. Department of Agriculture as follows:

	Cattle	Calves	Hogs	Sheep & Lambs
Boston, New York City Area[1]	12,271	10,290	51,561	35,497
Baltimore, Philadelphia	7,877	825	28,741	2,690
Cin., Cleve., Detroit, Indpls.	18,926	7,520	107,786	16,893
Chicago Area	24,325	7,007	42,353	4,210
St. Paul-Wis. Areas[2]	29,320	23,836	107,325	11,180
St. Louis Area[3]	11,904	1,751	74,607	3,843
Sioux City-So. Dak. Area[4]	19,000	...	79,756	17,050
Omaha Area[5]	36,927	165	73,362	9,012
Kansas City	12,089	1,682	25,189	4,185
Iowa-So. Minnesota[6]	30,824	10,195	267,291	27,862
Louisville, Evansville, Nashville, Memphis	10,188	5,948	46,630	...
Georgia-Alabama Area[7]	7,337	4,537	25,503	...
St. Joseph, Wichita, Okla. City	16,281	2,061	40,029	3,850
Ft. Worth, Dallas, San Antonio	9,044	5,282	14,352	7,182
Denver, Ogden, Salt Lake City	15,399	350	12,545	40,108
Los Angeles, San Fran. Areas[8]	20,534	1,664	23,766	21,370
Portland, Seattle, Spokane	5,904	286	15,534	5,464
Grand totals	288,150	83,999	1,036,330	210,346
Totals same week 1957	308,975	117,871	1,094,890	240,044

[1]Includes Brooklyn, Newark and Jersey City. [2]Includes St. Paul, So. St. Paul, Minn., and Madison, Milwaukee, Green Bay, Wis. [3]Includes St. Louis National Stockyards, E. St. Louis, Ill., and St. Louis, Mo. [4]Includes Sioux Falls, Huron, Mitchell, Madison, and Watertown, S. Dak. [5]Includes Lincoln and Fremont, Nebr., and Glenwood, Iowa. [6]Includes Albert Lea, Austin and Winona, Minn., Cedar Rapids, Davenport, Des Moines, Dubuque, Esterville, Fort Dodge, Marshalltown, Mason City, Ottumwa, Postville, Storm Lake and Waterloo, Iowa. [7]Includes Birmingham, Dothan and Montgomery, Ala., Albany, Atlanta, Moultrie, Thomasville and Tifton, Ga. [8]Includes Los Angeles, San Francisco, So. San Francisco, San Jose and Vallejo, Calif.

LIVESTOCK PRICES AT 11 CANADIAN MARKETS

Average prices per cwt. paid for specific grades of steers, calves, hogs and lambs at 11 leading markets in Canada during the week ended Sept. 27 compared with the same week in 1957 were reported to the Provisioner by the Canadian Department of Agriculture as follows:

Stockyards	GOOD STEERS All Weights		VEAL CALVES Good and Choice		HOGS* Grade B[1] Dressed		LAMBS Good Handyweights	
	1958	1957	1958	1957	1958	1957	1958	1957
Toronto	$23.90	$17.86	$31.00	$24.08	$26.25	$29.50	$21.00	$20.63
Montreal	22.35	....	29.00	22.45	26.55	29.75	19.55	18.20
Winnipeg	21.92	16.66	29.50	20.58	23.25	28.75	18.32	18.34
Calgary	21.45	16.85	23.90	15.65	22.97	26.98	16.95	16.50
Edmonton	20.65	16.00	26.00	18.00	22.80	27.85	17.40	17.80
Lethbridge	21.25	16.50	23.00	16.75	23.05	27.50	17.25	17.00
Pr. Albert	20.75	16.65	24.50	16.50	21.50	26.50	16.30	16.50
Moose Jaw	20.90	16.50	23.75	16.25	21.50	26.75	16.20	16.20
Saskatoon	21.25	16.00	26.00	17.00	21.50	27.00	16.60	16.50
Regina	21.25	16.38	25.50	17.00	21.50	27.00	16.90	17.00
Vancouver	....	....	24.25	....	....	....	....	16.25

*Canadian government quality premium not included.

SOUTHERN RECEIPTS

Receipts of livestock at six southern packing plant stockyards located in Albany, Moultrie, Thomasville, Tifton, Georgia, Dothan, Alabama, and Jacksonville, Florida, during the week ended October 3:

	Cattle	Calves	Hogs
Week ended Oct. 3	1,715	665	13,849
Week previous (five days)	1,450	580	12,416
Corresponding week last year	2,659	936	15,491

LIVESTOCK PRICES AT ST. JOSEPH

Livestock prices at St. Joseph on Wednesday, Oct. 8 were as follows:

CATTLE:	Cwt.
Steers, ch. & pr.	$25.50@27.00
Steers, gd. & ch.	24.00@26.25
Heifers, gd. & ch.	24.00@26.00
Cows, util. & com'l.	17.25@20.00
Cows, can. & cut...	15.00@17.00
Bulls, util. & com'l.	20.00@21.75
VEALERS:	
Good & choice	25.00@30.00
Calves, gd. & ch...	22.00@25.00
HOGS, U.S. No. 1-3:	
180/200 lbs.	18.75@19.50
200/220 lbs.	19.10@19.75
220/240 lbs.	19.10@19.50
240/270 lbs.	19.00@19.35
Sows, U.S. No. 1-3:	
270/360 lbs.	18.50@19.25
360/450 lbs.	17.75@18.50
LAMBS:	
Good & choice	21.50@22.00
Utility & good	none quoted

LIVESTOCK PRICES AT SIOUX CITY

Livestock prices at Sioux City on Wednesday, Oct. 8 were as follows:

CATTLE:	Cwt.
Steers, prime	$26.25@28.00
Steers, choice	24.25@26.75
Steers, good	23.50@24.50
Heifers, ch. & pr.	24.25@26.75
Heifers, good	23.00@24.50
Cows, util. & com'l.	17.50@20.00
Cows, can. & cut...	14.50@17.50
Bulls, util. & com'l.	21.50@22.50
Bulls, cutter	19.00@21.50
HOGS, U.S. No. 1-3:	
180/200 lbs.	18.50@19.25
200/220 lbs.	19.00@19.25
220/240 lbs.	18.85@19.25
240/270 lbs.	18.75@19.25
Sows, U.S. No. 1-3:	
270/360 lbs.	18.25@18.50
330/400 lbs.	17.50@18.50
400/550 lbs.	16.50@17.50
LAMBS:	
Good & choice	21.50@22.50
Choice, shorn	none quoted

SLAUGHTER REPORTS

Special reports to the NATIONAL PROVISIONER showing the number of livestock slaughtered at 13 centers for the week ended October 4, 1958, compared:

CATTLE

	Week ended Oct. 4	Prev. week	Cor. week 1957
Chicago‡	21,660	22,613	23,518
Kan. City‡	10,608	11,055	13,174
Omaha*‡	24,742	28,201	4,218
N. S. Yards‡	2,400	1,882	11,926
St. Joseph‡	9,899	10,825	11,107
Sioux City‡	13,153	13,111	12,468
Wichita*‡	3,026	2,799	2,852
New York & Jer. City†	12,271	12,910	15,305
Okla. City*‡	4,785	4,084	9,978
Cincinnati§	3,791	4,424	4,849
Denver‡	11,415	7,563	11,982
St. Paul‡	13,415	13,541	14,912
Milwaukee‡	4,949	....	4,355
Totals	136,114	133,008	140,644

HOGS

Chicago‡	21,522	21,492	23,440
Kan. City‡	15,347	14,574	15,115
Omaha*‡	41,756	43,035	9,684
N. S. Yards‡	18,552	20,232	38,090
St. Joseph‡	20,063	21,077	24,247
Sioux City‡	29,782	35,169	15,751
Wichita*‡	12,147	12,080	12,567
New York & Jer. City†	51,561	53,964	55,483
Okla. City*‡	7,401	2,585	11,762
Cincinnati§	9,563	10,385	11,904
Denver‡	5,664	6,739	9,528
St. Paul‡	45,075	45,081	42,828
Milwaukee‡	5,834	....	5,161
Totals	284,297	286,413	275,460

SHEEP

Chicago‡	3,486	3,510	5,720
Kan. City‡	2,820	1,743	2,907
Omaha*‡	7,195	4,235	1,322
N. S. Yards‡	....	....	3,255
St. Joseph‡	6,999	4,062	8,455
Sioux City‡	3,010	3,376	2,988
Wichita*‡	984	1,393	650
New York & Jer. City†	35,497	35,616	41,267
Okla. City*‡	690	729	1,856
Cincinnati§	460	254	376
Denver‡	26,004	19,455	31,184
St. Paul‡	4,668	5,931	6,735
Milwaukee‡	1,216	....	1,269
Totals	93,029	80,304	108,138

*Cattle and calves.
†Federally inspected slaughter, including directs.
‡Stockyards sales for local slaughter. §Stockyards receipts for local slaughter, including directs.

CANADIAN KILL

Inspected slaughter of livestock in Canada for the week ended Sept. 27:

CATTLE

	Week ended Sept. 27	Same week 1957
Western Canada	20,696	22,214
Eastern Canada	20,216	19,944
Totals	40,912	42,158

HOGS

Western Canada	50,219	31,831
Eastern Canada	66,528	62,801
Totals	116,747	94,632
All hog carcasses graded	126,892	104,007

SHEEP

Western Canada	6,027	6,417
Eastern Canada	18,560	14,445
Totals	24,587	20,862

NEW YORK RECEIPTS

Receipts of livestock at Jersey City and 41st st., New York market for the week ended Oct. 4:

	Cattle	Calves	Hogs*	Sheep
Salable	93	39	...	...
Total (incl. directs)	2,570	167	17,791	5,287
Prev. wk.: Salable	104	21	...	...
Total (incl. directs)	2,783	215	17,999	7,555

*Includes hogs at 31st Street.

CHICAGO LIVESTOCK

Supplies of livestock at the Chicago Union Stockyards for r current and comparative periods:

RECEIPTS

	Cattle	Calves	Hogs	Sheep
Oct. 2	1,126	115	7,899	832
Oct. 3	540	97	4,888	470
Oct. 4	51	4	1,018	23
Oct. 6	18,600	136	8,811	2,623
Oct. 7	8,000	100	11,000	1,200
Oct. 8	19,000	200	10,000	1,500
*Week so far	45,601	436	29,811	5,323
Wk. ago.	44,202	689	36,080	4,396
Yr. ago.	45,886	767	32,031	6,364

*Including 53 cattle, 5,803 hogs and 930 sheep direct to packers.

SHIPMENTS

Oct. 2	3,323	...	2,367	...
Oct. 3	1,485	37	1,870	333
Oct. 4	...	...	...	...
Oct. 6	6,416	51	3,277	675
Oct. 7	4,000	...	5,000	400
Oct. 8	7,000	...	4,000	300
Week so far	17,416	51	12,277	1,375
Wk. ago.	18,044	12	14,629	692
Yr. ago.	15,561	36	8,833	826

OCTOBER RECEIPTS

	1958	1957
Cattle	60,109	61,336
Calves	940	1,739
Hogs	52,208	73,899
Sheep	7,808	12,534

OCTOBER SHIPMENTS

	1958	1957
Cattle	28,477	34,936
Hogs	20,891	18,716
Sheep	1,750	2,016

CHICAGO HOG PURCHASES

Supplies of hogs purchased at Chicago, week ended Wed., Oct. 8:

	Week ended Oct. 8	Week ended Oct. 1
Packers' purch.	19,035	22,289
Shippers' purch.	14,622	22,869
Totals	33,657	45,158

LIVESTOCK RECEIPTS

Receipts at 20 markets for the week ended Friday, Oct. 3, with comparisons:

	Cattle	Hogs	Sheep
Week to date	301,000	393,000	150,000
Previous week	301,000	382,000	135,000
Same wk. 1957	315,000	431,000	184,000
Totals, 1958	10,171,000	15,388,000	5,333,000
Totals, 1957	10,881,000	16,080,000	5,977,000

PACIFIC COAST LIVESTOCK

Receipts at leading Pacific Coast markets, week ended Oct. 2:

	Cattle	Calves	Hogs	Sheep
Los Ang.	3,670	130	980	30
N. P'tland.	2,200	425	1,850	4,100
San Fran.	170	10	320	550

LIVESTOCK PRICES AT LOUISVILLE

Livestock prices at Louisville on Wednesday, Oct. 8 were as follows:

	Cwt.
CATTLE:	
Steers, choice	$26.50@27.00
Steers, good	25.50@26.50
Steers, std. & gd.	none quoted
Heifers, good	24.00 only
Cows, util. & com'l.	17.50@19.50
Cows, can. & cut.	15.50@18.25
Bulls ,util. & com'l.	20.00@22.00
VEALERS:	
Choice & prime	34.00@36.00
Good & choice	29.00@34.00
Calves, gd. & ch.	21.00@26.00
HOGS, U.S. No. 1-3:	
195/200 lbs.	20.00@20.25
200/220 lbs.	20.00@20.25
220/240 lbs.	20.00@20.25
240/260 lbs.	none quoted
Sows, U.S. No. 1-3:	
300/400 lbs.	18.00@18.50
400/550 lbs.	17.75@18.60
LAMBS:	
Choice & prime	22.50@23.00
Good & choice	22.00@22.50
Utility & gd.	16.00@19.50

LIVESTOCK PRICES AT LEADING MARKETS

Livestock prices at five western markets on Tuesday, Oct. 7 were reported by the Agricultural Marketing Service, Livestock Division, as follows:

	N.S. Yds.	Chicago	Kansas City	Omaha	St. Paul
HOGS:					
BARROWS & GILTS:					
U.S. No. 1-3:					
120-140 lbs.	$17.25-18.75	None qtd.	None qtd.	None qtd.	None qtd.
140-160 lbs.	18.25-19.50	None qtd.	None qtd.	None qtd.	None qtd.
160-180 lbs.	19.25-20.10	$18.00-19.75	$18.50-19.00	$18.00-19.00	$17.75-18.50
180-200 lbs.	19.75-20.25	19.50-20.25	19.00-19.25	18.75-19.50	18.25-20.00
200-220 lbs.	19.75-20.25	19.65-20.35	19.25-19.85	19.25-19.50	18.75-20.00
220-240 lbs.	19.75-20.25	19.75-20.25	19.25-19.85	19.25-19.50	18.75-20.00
240-270 lbs.	19.75-20.25	19.75-19.90	19.10-19.75	19.00-19.50	18.75-20.00
270-300 lbs.	19.50-20.00	19.50-19.85	18.75-19.50	18.75-19.25	None qtd.
300-330 lbs.	None qtd.	None qtd.	None qtd.	None qtd.	None qtd.
330-360 lbs.	None qtd.	None qtd.	None qtd.	None qtd.	None qtd.
Medium:					
160-220 lbs.	18.75-19.25	17.50-19.00	18.00-18.75	17.50-18.50	17.50-18.50
SOWS:					
U.S. No. 1-3:					
180-270 lbs.	19.00 only	19.50 only	19.00 only	None qtd.	None qtd.
270-300 lbs.	19.00 only	19.25-19.50	18.75-19.00	18.50-18.75	18.25-18.50
300-330 lbs.	18.75-19.00	19.25-19.50	18.75-19.00	18.50-18.75	18.00-18.25
330-360 lbs.	18.25-19.00	19.00-19.25	18.50-19.00	18.25-18.50	18.00-18.25
360-400 lbs.	17.75-18.50	18.75-19.00	18.50-18.75	18.00-18.25	17.50-18.00
400-450 lbs.	17.50-18.00	18.25-18.75	18.00-18.50	17.75-18.00	17.25-17.75
450-550 lbs.	17.50-17.75	17.25-18.25	17.75-18.00	17.50-17.75	17.00-17.25
Boars & Stags, all wts.	14.75-16.00	14.50-16.00	14.25-15.00	14.25-15.00	None qtd.
SLAUGHTER CATTLE & CALVES:					
STEERS:					
Prime:					
700- 900 lbs.	None qtd.	27.75-29.00	None qtd.	None qtd.	None qtd.
900-1100 lbs.	None qtd.	27.75-29.00	None qtd.	None qtd.	None qtd.
1100-1300 lbs.	None qtd.	27.25-29.00	None qtd.	None qtd.	None qtd.
1300-1500 lbs.	None qtd.	26.75-28.00	None qtd.	27.00 only	None qtd.
Choice:					
700- 900 lbs.	26.00-27.75	26.50-28.00	25.00-27.00	25.50-27.00	25.50-26.50
900-1100 lbs.	26.00-27.75	26.25-28.00	24.75-27.00	25.50-27.00	25.50-27.00
1100-1300 lbs.	25.75-27.50	26.00-28.00	24.75-27.00	25.00-27.00	25.00-27.00
1300-1500 lbs.	25,50-27.25	26.00-27.50	24.25-26.25	24.75-26.75	24.50-26.00
Good:					
700- 900 lbs.	24.00-26.00	25.00-26.50	23.00-24.75	24.00-25.50	25.00-25.50
900-1100 lbs.	24.00-25.75	24.75-26.50	23.00-24.75	24.00-25.50	24.50-25.50
1100-1300 lbs.	23.50-25.75	24.50-26.25	22.75-24.75	23.75-25.00	24.50-25.50
Standard, all wts.	21.50-24.00	22.50-25.00	20.50-23.00	22.00-23.50	22.00-24.00
Utility, all wts.	19.00-21.50	21.50-23.00	19.00-20.50	20.00-22.00	20.50-22.00
HEIFERS:					
Prime:					
600- 800 lbs.	None qtd.	26.75-27.50	None qtd.	None qtd.	None qtd.
800-1000 lbs.	None qtd.	26.75-27.50	None qtd.	None qtd.	None qtd.
Choice:					
600- 800 lbs.	25.50-27.00	25.50-27.00	24.75-26.50	25.00-26.00	25.00-26.50
800-1000 lbs.	25.25-27.00	25.50-27.00	24.50-26.50	25.00-26.00	25.00-26.50
Good:					
500- 700 lbs.	24.00-25.50	24.25-25.50	23.00-24.75	23.50-25.00	24.00-25.00
700- 900 lbs.	23.75-25.50	24.25-25.50	22.75-24.75	23.50-25.00	24.50-25.50
Standard, all wts.	21.00-24.00	22.00-24.25	20.00-23.00	21.50-23.00	22.00-23.50
Utility, all wts.	17.00-19.00	18.25-20.00	17.50-18.75	17.75-19.75	16.50-18.00
COWS:					
Commercial, all wts.	19.00-20.00	19.75-21.50	18.75-19.50	19.50-20.50	18.00-19.00
Utility, all wts.	17.00-19.00	18.25-20.00	17.50-18.75	17.75-19.75	16.50-18.00
Can. & cut., all wts.	12.00-17.50	15.50-18.75	14.50-17.50	15.75-17.75	14.00-16.50
BULLS (Yrls. Excl.), All Weights:					
Good	None qtd.	None qtd.	None qtd.	None qtd.	21.50-22.50
Commercial	20.50-22.00	23.50-24.00	20.50-22.00	21.50-22.50	21.50-22.50
Utility	19.00-20.50	21.50-23.50	19.00-20.50	19.50-21.50	21.00-23.00
Cutter	15.50-19.00	20.00-21.50	18.00-19.50	18.50-20.00	21.00-22.50
VEALERS, All Weights:					
Ch. & pr.	27.00-33.00	32.00 only	27.00-31.00	24.00-28.00	28.00-32.00
Stand. & gd.	20.00-28.00	24.00-32.00	23.00-27.00	20.00-25.00	23.00-28.00
CALVES (500 Lbs. Down):					
Choice	24.00-27.00	26.50-29.00	24.00-26.00	None qtd.	25.00-27.00
Stand. & gd.	17.00-25.00	22.00-27.00	18.00-24.00	None qtd.	18.00-25.00
SHEEP & LAMBS:					
LAMBS (110 Lbs. Down):					
Prime	23.00-23.50	24.00-25.00	None qtd.	None qtd.	22.25 only
Choice	21.50-23.50	22.75-24.50	None qtd.	21.50-22.25	22.00-22.25
Good	20.50-21.50	20.50-23.00	21.00-21.50	20.25-21.50	21.50-22.25
LAMBS (105 Lbs. Down) (Shorn):					
Prime	None qtd.	None qtd.	None qtd.	None qtd.	None qtd.
Choice	None qtd.	22.50 only	21.50-22.25	21.50-22.00	21.50-21.75
Good	20.00-21.75	None qtd.	None qtd.	20.25-21.50	None qtd.
EWES:					
Gd. & ch.	5.50- 7.00	6.50- 8.00	6.00- 7.50	6.50- 8.50	6.00- 7.50
Cull & util.	4.00- 5.75	5.00- 6.50	4.00- 6.00	4.50- 6.50	4.50- 6.00

Royal Packing Company

Celebrating our 50th Anniversary in our new plant

St. Louis' Largest Exclusive Beef Packer

Slaughterers and Shippers of Straight and Mixed Cars

REGULAR and KOSHER BEEF PRODUCTS

***David Sokolik* for Beef Carcass and Wholesale Cuts**

1700 BLOCK N. VANDEVENTER AVE., ST. LOUIS, 13, MO. • *Phone:* FRanklin 1-6040 • *Teletype:* St. L. 430

HAM
BACON

SINCE 1876

"Partridge"

LARD
SAUSAGE

© THE H. H. MEYER PACKING CO. • CINCINNATI 14, OHIO

CLASSIFIED ADVERTISING

Undisplayed: set solid. Minimum 20 words, $5.00; additional words, 20c each. "Position Wanted," special rate; minimum 20 words, $3.50; additional words, 20c each. Count address or box numbers as 8 words. Headlines, 75c extra. Listing advertisements, 75c per line. Displayed, $11.00 per inch.

Unless Specifically Instructed Otherwise, All Classified Advertisements Will Be Inserted Over a Blind Box Number.

CLASSIFIED ADVERTISING PAYABLE IN ADVANCE PLEASE REMIT WITH ORDER

POSITION WANTED

CONTROLLER-CREDIT MANAGER: Excellent experience with outstanding background in frozen portion control, fresh meat, sausage manufacturing, processing. If you desire the best, please consider me. College graduate with credit institutes' highest award. Age 41-married-available 2 weeks notice. Will relocate. W-386, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SUPERVISOR: 22 years' experience in pork kill and cut, beef kill, pork and boning, curing, smoking, rendering, refrigeration, hides and maintenance. Can train personnel and control costs, quantity and quality. East, west coast or midsouth preferred. W-392, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

INDUSTRIAL ENGINEER: With 10 years' experience and responsibility in the packing industry—time study, methods, costs, cost controls, yields, incentives, plant layout, etc., desires challenging staff or managerial engineering position. Resume upon request. W-393, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

LIVESTOCK BUYER: Open markets, country buying and field work. Well experienced. Available now. Will relocate. Bondable, any amount. W-337, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

BEEFMAN and CATTLE BUYER: 20 years' experience. Wants to locate in midwest. Will furnish excellent references. Write to Box W-387, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

HELP WANTED

HAM DEPARTMENT FOREMAN: Excellent opportunity for aggressive man. Must be able to take charge of complete ham operation of progressive eastern packer. This includes boning, cooking, canning etc. Send complete resume to Box W-401, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N.Y.

HELP WANTED

SALES MANAGERSHIP

And still greater opportunity to achieve a high place in management is open with a progressive southern packer with excellent record for profitable, growing operation. Modern plant is qualified for federal inspection, but now serves thriving industrial and agricultural intrastate territory with full line of products. A younger man with experience in packinghouse sales management, some knowledge of operations, vision and leadership ability is desired and will be encouraged to advance in the organization. W-388, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SALES REPRESENTATIVE
COMPLETE LINE OF
Seasonings - Spices - Cures - Binders - Phosphates and Specialties

Experience in meat and other food processing field essential. Several choice territories open. Contact at AMI Convention, Room 807-808 Palmer House, or write or phone

ARCHIBALD & KENDALL, Inc.
487 Washington St. New York 13, N. Y.
Phone: WOrth 2-7715

SALESMAN WANTED FOR NEW YORK CITY

EXPERIENCED: Lamb and veal salesman wanted. Also want experienced pork and provision salesman. W-402, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N.Y.

WANTED: Experienced man to assume responsibility for ammonia system refrigeration. Present capacity: 1,200 cattle and 3,000 hogs weekly. Will offer attractive proposition to the right man. Apply to Box W-379, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WANTED: Experienced beef man for Iowa plant. Thoroughly familiar with government grading and shipping to eastern accounts and chain stores. W-389, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MISCELLANEOUS

SALES REPRESENTATIVE: For established territory in Texas, Louisiana, Arkansas and Oklahoma wanted. Must have experience selling seasonings, binders and specialty items. Excellent opportunity for man covering this territory with casings and allied lines. Proven earning potential of $10,000 a year. Highly favorable commission arrangements can be worked out. W-383, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N.Y.

LIVESTOCK BUYER: High caliber, thorough knowledge of grades and yields, cattle and hogs. Market and country buying. Must know southern California and Arizona area. Salary open. Give qualifications and experience and salary desired. W-394, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

EXPERIENCED CATTLE BUYER

TOP MAN: Wtih good connections in terminal markets for midwestern independent beef packer. Potential earnings for right man up to $25,000 per year. Only experts need reply. Box W-399, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SUPERINTENDENT: Wanted for night operations in eastern pork processing plant. Salary commensurate with ability. Up to age 60. Submit complete resume. W-395, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

ROUTE SALES SUPERVISOR: For smoked meat plant in New York City. Must know metropolitan area. Experienced and aggressive. High salary. Write to Box W-380, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

MANAGER: For a dog food plant. We manufacture canned and frozen boxed dog foods of all kinds. Excellent salary. State experience, age and salary expected. Confidential. B. Hill, president, Hill Packing Company, P.O. Box 148, Topeka, Kansas.

BARLIANT'S WEEKLY SPECIALS

Current General Offerings

Sausage & Bacon

1147—CURING MACHINE: Globe #7640, "Injecto-Cure", 1½ HO. TEFC mtr., stainless steel ¾ HP. pump, head in A-1 condition $1,250.00

1274—SLICER: Anco #827 Hydramatic, shingling & packing conveyor unit, 4—stations, 3—Exact Weight Scales $4,850.00

1155—FROZEN MEAT SLICER: GMC Hydraulice deluxe mdl. 16-24, R/F type, serial #1977, stainless, 5 HP. Perfect condition $2,500.00

1477—BACON SKINNER: Townsend #35, excellent condition $1,000.00

1076—DIANA DICER: C. E. Dippel mdl. #17, large size, 3000 lbs./hr., plates for ½" & 1" dicing, 3 HP. mtr., extra set dies, like new $1,975.00

9863—STUFFFR: Randall, 500 lb. cap. $950.00

1285—STUFFFR: Buffalo, 300 lb. cap. $750.00

1408—STUFFFR: Randall, 100 lb. cap., w/valves, air piping & Curtiss 1 HP. Air Compressor $675.00

1281—GRINDER: Buffalo #66BG, w/direct connected 25 HP. motor & starter $875.00

1423—GRINDER: Kleen-Kut #611, 7½ HP. totally enclosed motor $575.00

9752—GRINDER: Anco #866-A, V-belt drive, St. Louis type cylinder & feed screw, 8⅝" plates, 10,000 lbs./hr. $475.00

1468—MIXFR: Boss #35, 1000 lb. cap., stainless steel bowl, 10 HP. motor $775.00

1422—MIXER: Buffalo #4, 1000 lb. capacity, 7½ HP. motor ..... Bids requested

9710—SILENT CUTTER: Buffalo #65-B, self-emptying, 10-knives, 60 HP. mtr. & starter $1,775.00

1421—SILENT CUTTER: Buffalo #38-B, 175 lb. cap., direct connected 15 HP. motor $625.00

1427—STUFFING TABLE: stainless steel top, 12' x 54" x 35" high $165.00

1172—JOURDAN COOKER: mdl. TSC, ser. #514, 57" x 53" x 8'10" high, 1 HP. motor $575.00

1295—PACKAGE SEALER: Great Lakes CS-17, w/conveyor & Teflon covered heating plate $165.00

1293—HAM, BACON & HIDE TRUCKS: (8) similar Globe #7281, galv., shallow type, 38" x 65" x 9" deep, 20" iron wheels, w/handles ..... ea. $40.00

1249—HAM MOLDS: (976) Globe Hoy, stainless steel with covers & springs:
476—#114—12" x 6¼" x 5½" ..... ea. $12.75
500—#112—11" x 6" x 5¼" ..... ea. $12.75

9712—WIRE MOLDS: (222) stainless steel, 24" x 3¾" x 3¾" ..... ea. $3.25

Rendering & Lard

1454—GRAVITY DRYFR: Anderson Scraper type, A-1 cond., 72 tubes, 5 HP. gearhead mtr.....ea. $2,500.00

1453—HYDRAULIC PRESS: Anco 300 ton, latest style, w/Electric Pump $4,250.00

9867—LARD VOTATOR: Girdler Jr. model, first class condition $2,450.00

9886—EXPELLER: Anderson RB, 15 HP. $2,500.00

1322—COOKER: French Oil Mill 4 x 10', 15 HP. enclosed mtr., w/Dodge gear reducer, only used for rendering lard, excellent condition $1,650.00

1215—COOKER: Dupps, jacketed head, 4' x 7', 25 HP. motor $1,500.00

1277—HOG: Diamond #35, 15½" x 16½" opening, extra set of knives $950.00

1318—HAMMERMILL: Anco #624, Jay-Bee, size 2UX, ½" per screw, w/30 HP. mtr. & starter $475.00

1465—LARD PRESS: Koch, 16 gal. cap., hand operated, like new $65.00

Miscellaneous

1426—AMMONIA COMPRESSORS: (2) Frick 12 x 12, fully automatic, 175 HP., well maintained $6,750.00

1402—BELLY ROLLER & CONVEYOR TABLE: for Pork cutting, 34' x 7' x 35" high, w/34" x 4" stainless steel slats, 24" dia. x 24" single roll, 7 HP. explosion proof mtr. $2,750.00

1276—FRESH HOG CASING UNIT: Anco #595, incl. Crusher, ¾ HP. mtr., 30" Stripper, ½ HP. mtr., 16" Finisher, ½ HP. mtr. $1,075.00

1493—BEEF LOWERING ARM: Rockford, hydraulic cylinder & controls $1,500.00

1434—DROP FINGER CONVEYOR: Anco, (approx. 240'), 12-sprockets, including drive...Bids requested

All items subject to prior sale and confirmation

WRITE FOR FULL PARTICULARS

1631 S. Michigan Ave., Chicago 16, Ill.

WAbash 2-5550

• New, Used & Rebuilt Equipment

• Liquidators and Appraisers

BARLIANT & CO.

CLASSIFIED ADVERTISING

EQUIPMENT WANTED

WANTED: Sausage, meat packing and canning equipment. Realize profits on your used equipment by letting us buy or list it for you.
H. D. LAUGHLIN & SON
3701 N. Grove St., Fort Worth, Texas
Phone MArket 4-7231

WANTED: Used or new equipment, all types, any condition. Top prices paid. EW-367, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

EQUIPMENT FOR SALE

1 LABELER—Chisholm Ryders, MH 32A, Machine No. 520 ..... $ 650.00
1 SCREW PRESS—Anco 202-3. Like New Condition 2500.00
1 BOSS CATTLE HORN AND BONE SAW. S. S. Top. No. 396 ..... 375.00
1 CHOPPING BLOCK, 66" long, 36" wide, 36" deep. Cost $450, Never USED.. 100.00
JONES-CHAMBLISS COMPANY
P. O. Box 2399
Jacksonville 3, Florida

FOR SALE: 7½' Lindsay truck body. Insulated and refrigerated. Three coldplates. All steel clad. In good condition. $350. Smith Bros. Fisheries, 100 North Franklin Street, Port Washington, Wisconsin.

FLEX VAC MACHINE: Model 6-6 four pocket (18 per min) vacuum packaging machine for 6-8 oz. luncheon meat, complete with 50 CFM Beech-Russ vacuum pump. Both in excellent condition. Contact Mr. Robert W. Acker, c/o Tom Sawyer Meat Products, Inc., 1301 S. Fourth St., Minneapolis, Minn. Phone Federal 2-8609.

ANDERSON EXPELLERS

★ **All Models, Rebuilt, Guaranteed We Lease Expellers** ★

PITTOCK & ASSOCIATES, Glen Riddle, Penna.

1—Anderson Super Duo Expeller
1—Anderson Duo Expeller, reconditioned and guaranteed like new.
2—Used 125 H.P. package water tube boilers.
KEITH ENGINEERING COMPANY
4020 Bandini Boulevard Los Angeles 23, Calif.

FOR SALE: 1958 and 1956 Chevrolet 6400 model-11½ ft. Insulated body. Two rear quarter doors. Trucks in extra fine condition. 1955 1½ Ton Dodge and 1957 1½ Ton International with 8½ ft. insulated and refrigerated (Hold Plates) Body. Both trucks in excellent condition. HERTZ LICENSEE, Phone 6-1244 Johnstown, Pa. Ray Gardill.

FOR SALE: Factory made 1955 tandum trailer. In perfect condition. Sacrifice price—$1,500.00. Smithfield Hog Market Inc., P.O. Box 248, Phone 3131, Smithfield, North Carolina.

PLANT WANTED

WANTED TO BUY or RENT: Sausage kitchen in New York or New Jersey area with capacity of 10 to 25,000 pounds weekly production. W-400, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

WANT TO BUY: Small sausage plant in a southern state. Send full details. All replies confidential. FS-391. THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANT FOR RENT

RENDERING PLANT: In the south, 250M population, 5-10 year lease. Two Anco cookers complete with 4 trucks. Established business and operating. No competition within 80 miles. Walk right in and start making money. Owner wants to have more time for other business. FR-397. THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANTS FOR SALE

MODERN BUILDING & EQUIPMENT: 50 x 60, meat plant, catering to restaurants, institutions and markets, with portion control and wholesale cuts. Also retail and home freezer business. Tracked cooler 27 x 38. Freezer 14 x 14, workroom, 3 stall garage, office, plus 30,000 sq. ft. of land for expansion and parking. Want to sell because 'TIRED OF MAKING MONEY'. Located in North central Illinois. FS-382, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANTS FOR SALE

PLANT IN EAST TENNESSEE: Fully equipped. Capacity 400 to 500 cattle or 1500 calves or hogs weekly. Killing floor capable of handling more and plenty of room for expansion. Sausage room fully equipped. Plenty of livestock and labor available. Priced at fraction of cost for quick sale. FS-396, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SLAUGHTERING and PROCESSING PLANT: Located 30 miles from Milwaukee, Wisconsin, in active industrial area. Wholesale, retail and mail order. Well known throughout central Wisconsin for high quality products. Owner retiring and will partially finance qualified buyer. FS-398, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MODERN HIDE WAREHOUSE

FOR SALE: Building only 3 years old, 80 x 250. Land 317 x 243 in center of packing house area. Paved 5 car railroad spur.
MIKE McCONHAY
2627 South Soto St., Los Angeles 23, Calif.
Phone ANgelus 3-6316

FOR RENT: Government inspected boning and fabricating coolers 100' x 100'—75' x 100'—50' x 100'—switch tracks in rear of coolers. Room for 10 trailers. Front dock. FR-390. THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MISCELLANEOUS

FRED W. DEPPNER, CONSULTANT
SAUSAGE, CURING, SMOKING
309 W. 30th MOhawk 2-8008
HUTCHINSON, KANSAS

SUPERINTENDENT: PRODUCTION
WINCHESTER PACKING COMPANY, INC.
HUTCHINSON, KANSAS

WEST COAST PET FOOD CANNERS
Have steady supply lungs, melts, tripe, liver and other items for sale. FS-381. THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MEAT SAMPLING KNIVES FOR ADVERTISING AND GIFT USE
Folding pocket style. Stainless steel blade, 5½" long over-all. Simulated ivory handle engraved with your advertising 25 or more, $1.75 each.
WRITE FOR CATALOG
LOUIS M. GERSON CO.
58 Dearing Rd. Mattapan, Mass.
Phone Cunningham 6-1463

YOUR PACKAGED MEATS NEED CODE DATING
We offer a Complete Line of Code Daters and Name Markers—Automatic for conveyor Lines and Wrapping Machines—also Power-driven Coders for Bacon Boards and other Boards used in the Meat Packing Industry.
Write for details on a specific problem
KIWI CODERS CORPORATION
4027 N. Kedzie Ave. Chicago 18, Ill.

DECKER & STEPHENS CATTLE CO.
CATTLE ORDER BUYERS —
44 YEARS' EXPERIENCE
Suppliers of slaughter cattle, bonded, certified.
NATIONAL STOCK YARDS
ST. LOUIS, MISSOURI
PHONE Upton 4-6911 or Upton 4-6135

HOG • CATTLE • SHEEP

SAUSAGE CASINGS
ANIMAL GLANDS

Selling Agent • Order Buyer
Broker • Counsellor • Exporter • Importer

SAMI S. SVENDSEN
407 SO. DEARBORN ST., CHICAGO 5, ILL.

ADVERTISERS
in This Issue

Firms listed here are in partnership with you. Products and equipment they manufacture and services they render are designed to help you do your work more efficiently, more economically, and make better products which you can merchandise more profitably. Their advertisements offer you useful product information you can use with profit.

Agar Packing Company 144
Air-Way Pump & Equipment Company 184
Alfa International Corp. 173
Allbright-Nell Co., The ..... Third Cover
American Can Company 6, 7
American Case Liner Co. 152
American Hair & Felt Company 150
American Maize Products Company 21
American Spice Trade Association 66
American Stock Yards Association 64
Anderson Company, The V. D. 49
Archibald & Kendall, Inc. 149
Asmus Brothers, Inc. 68

Bakelite Company,
Division of Union Carbide Canada Limited 26
Barliant and Company 188
Belaskas and Associates 56
Brennan Company, The P. 140
Bunn Co., B. H. 52

Calgon Company 73
Cashin, Inc. 67
Chevrolet Division of General Motors 24
Chicago Refining Corporation 146
Cincinnati Butchers' Supply Company, The 32
City Products Corporation 56
Colonial Corned Beef Co. 174
Continental Can Company 30
Cooper Co., Inc., Fredrick B. 144
Crayton's Southern Sausage Co. 155
Cryovac Company, The 9
Cudahy Packing Company, The 28
Custom Food Products, Inc. 14

Darling and Company 182
Davies Co., Inc., William 66
Derba, E. A. 150
Dewied Casing Company, A. 151
Diamond Crystal Salt Co. 12
Dippel & Company, Inc., C. E. 35
Dole Refrigerating Company 149
Dorsey Trailers 8
Dow Chemical Company, The 33
Drehmann Paving & Flooring Co. 156
Drying Systems Co. 60
Du Bois Co., Inc., The 155
duPont de Nemours & Co., (Inc.), E. I. 139
Dupps Company, The 53

Eastman Chemical Products, Inc. 45
Edwards Inc., H. H. 4, 140
Everhot Manufacturing Company 176
Exact Weight Scale Co. 48
Excel Packing Company, Inc. 72

Fibreboard Paper Products Corporation 37, 38
Firestone Tire & Rubber Company 51
First Spice Mixing Company, Inc. 27
Ford Motor Company 16, 17
Frank & Sons, Inc., G. F. 174
French Oil Mill Machinery Company, The 158
Fruchtbaum & Maitin 173

Galesburg Order Buyers, Inc. 60
Gebhardt's Controlled Refrigeration Systems 31
Globe Company, The 61
Goetze, Albert F., Inc. 152
Gold Medal Packing Corporation 157
Gray Company, P. G. 152
Griffith Laboratories, Inc., The 59

Ham Boiler Corporation 18
Harding Market Co., John P. 153
Heekin Can Company 154
Heller & Company, B. 3
Henschien, Everds and Crombie 44
Hess-Line Company 184
Hess-Stephenson Company 151
Hoffmann-La Roche, Inc. 43
Hollenbach Inc., Chas. 175
Hormel & Co., Geo. A. 40
Howe Ice Machine Co. 157
Hunter Manufacturing Co. 52
Hygrade Food Products Corp. 143

International Harvester Company 141

Jarvis Corporation 172
Jourdan Process Cooker Co. 145
Julian Engineering Company 68

Kadison Laboratories, Inc. 10, 11
Kartridg-Pak Machine Co. 70
Koch Equipment Co. 23
Kohn Company, Edward 64
Kohnstamm & Co., Inc., H. 157
Krauss, Inc., John 176
Kurly Kate Corp. 48

Laudenslager Inc., J. K. 158
Le Fiell Company 54
Leland Chemical Co., Inc. 142
Levi & Co., Inc., Berth. 13
Lily Tulip Cup Corp. 29
Linker Machines, Inc. 36
Lufthansa German Airlines 60

Marhoefer Packing Company, Inc. 172
Mayer & Sons Co., Inc., H. J. 39
Mayer and Company, Oscar 148
Meat Industry Suppliers 47
Meat Packers Equipment Co. 41
Merck and Co., Inc. 34
Metropolitan Fats & Oils, Inc. 71
Meyer Packing Co., The H. H. 167
Morrell and Company, John 66
Mound Tool Co. 146

Normal Meat Company 156
North American Car Corporation 42

Peters Machinery Company 140
Pfizer & Co., Inc., Chas. 19, 20
Philadelphia Boneless Beef Co. 158
Pollack Packing Co., John 150
Preservaline Manufacturing Company 74

Rath Packing Company, The 173
Recold Corporation 65
Royal Packing Company 187

St. John and Co. 5
Sanfax Company, The 22
Saratoga Meat Products Company 154
Schluderberg, Wm.-Kurdle, T. J., Co. 154
Seaberg Company, Edward R. 153
Sheet Metal Engineering Co. 153
Shortening Corporation of America, Inc. 155
Sioux City Dressed Beef, Inc. 15
Sioux City Dressed Pork, Inc. 50
Smith, Brubaker & Egan 142
Smith's Sons Co., John E. ..... Second Cover
Spicene Company of America, Inc. 63
Standard Bag Company 54
Standard Casing Co., Inc., The 142
Stange Co., Wm. J. 55
Staren Co., John E. 146
Sutherland Paper Company ..... Fourth Cover

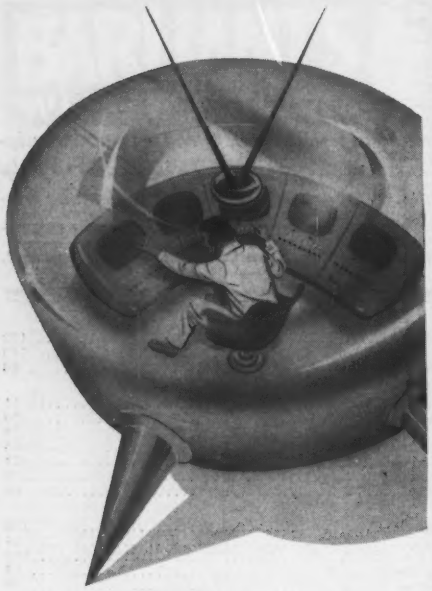
Takamine Laboratory 70
Tee-Cee Manufacturing Co., The 144
Tee-Pak, Incorporated 148
Townsend Engineering Company 57

U. S. Industrial Chemicals Co. 69
U. S. Slicing Machine Company, Inc. 25
Union Carbide Canada Limited,
Bakelite Division 26
Union Steel Products Co. 58
United Cork Companies 56
United States Cold Storage Corporation 72
United States Rubber 46

Vac-Tie Fasteners, Inc. 64
Vegex Company 175
Vogt Machine Company, Henry 147

Wass Food Sales, Inc. 151
West Carrollton Parchment Company 62
Western Buyers 184
Williams Patent Crusher & Pulverizer Co. 156
Wimp Packing Company 148

While every precaution is taken to insure accuracy, we cannot guarantee against the possibility of a change or omission in this index.



EDITORIAL STAFF

EDWARD R. SWEM
Vice President and Editor
GREGORY PIETRASZEK
Technical Editor
BETTY STEVENS
Associate Editor
JOHN C. CUTTING
Associate Editor
GUST HILL
Market Editor

*

ADVERTISING DEPARTMENT

15 W. Huron St.
Chicago 10, Ill.
Telephone: WHitehall 4-3380
ROBERT J. CLARK
Advertising Manager
CHARLES W. REYNOLDS
JOHN W. DUNNING
WILLIAM K. MURRAY
MARY JABSEN
Production Manager
ROBERT T. WALKER
GARDINER L. WINKLE
New York Representatives
527 Madison Avenue (22)
Tel. ELdorado 5-6663
EDWARD M. BUCK
Southeastern Representative
P.O. Box 171, St. Petersburg, Fla.
McDONALD-THOMPSON
West Coast Representatives
SAN FRANCISCO
625 Market St., (5)
LOS ANGELES
3727 W. 6th St., (5)
SEATTLE
1008 Western Ave., (4)
DENVER
222 Colo. Natl. Bank Bldg. (2)
HOUSTON
3217 Montrose Blvd., (6)
DALLAS
5528 Dyer St., (6)
TULSA
2010 S. Utica (4)

*

EXECUTIVE STAFF

THOMAS McERLEAN
Chairman of the Board
LESTER I. NORTON
President
A. W. VOORHEES
Secretary

THE NATIONAL Provisioner

VOLUME 139 OCTOBER 11, 1958 NUMBER

AMI ANNUAL MEETING

Contents

THE CONVENTION IN REVIEW 76

CHANGING PATTERNS IN LIVESTOCK PRODUCTION AND PROCUREMENT

- One-Third Century of Dynamic Change 78
- Consumer Quality and Quantity in Transition 81
- Shifts in Livestock Volume, Methods and Marketing 85
- Three Experts Look at Effects and Problems 88

CHANGING PATTERNS AND EFFECT ON PLANT OPERATIONS

- Mechanization or Automation, Which, When, How 95
- Automated Processing of Rendered Fats 99
- Mechanized Hide Takeup 103
- Panel Discusses Automation and Mechanization 104

CHANGING PATTERNS AND EFFECT ON PROCESSING

- Advances in Preparation of Sausage Emulsions 108
- Mechanization of Order Assembly 112
- Quality Control—Key to Efficient Processing 113
- Application of New Tools and Techniques 117

CHANGING PATTERNS IN SALES DISTRIBUTION

- Research Tells About Meat Consumers 121
- Meat Retailing is Different Today 126
- Industry Salesmanship Lags Behind 133
- How to Meet New Situations in Distribution 160

ANNUAL DINNER OF THE AMI 136

AWARDS TO 50-YEAR VETERANS 169

NEW EQUIPMENT ON DISPLAY 163

MARKET SUMMARIES BEGIN 178

er

MBER

NG

... 76

... 78
... 81
... 85
... 88

... 95
... 99
...103
...104

...108
...112
...113
...117

...121
...126
...133
...160

...136

...169

...163

...178